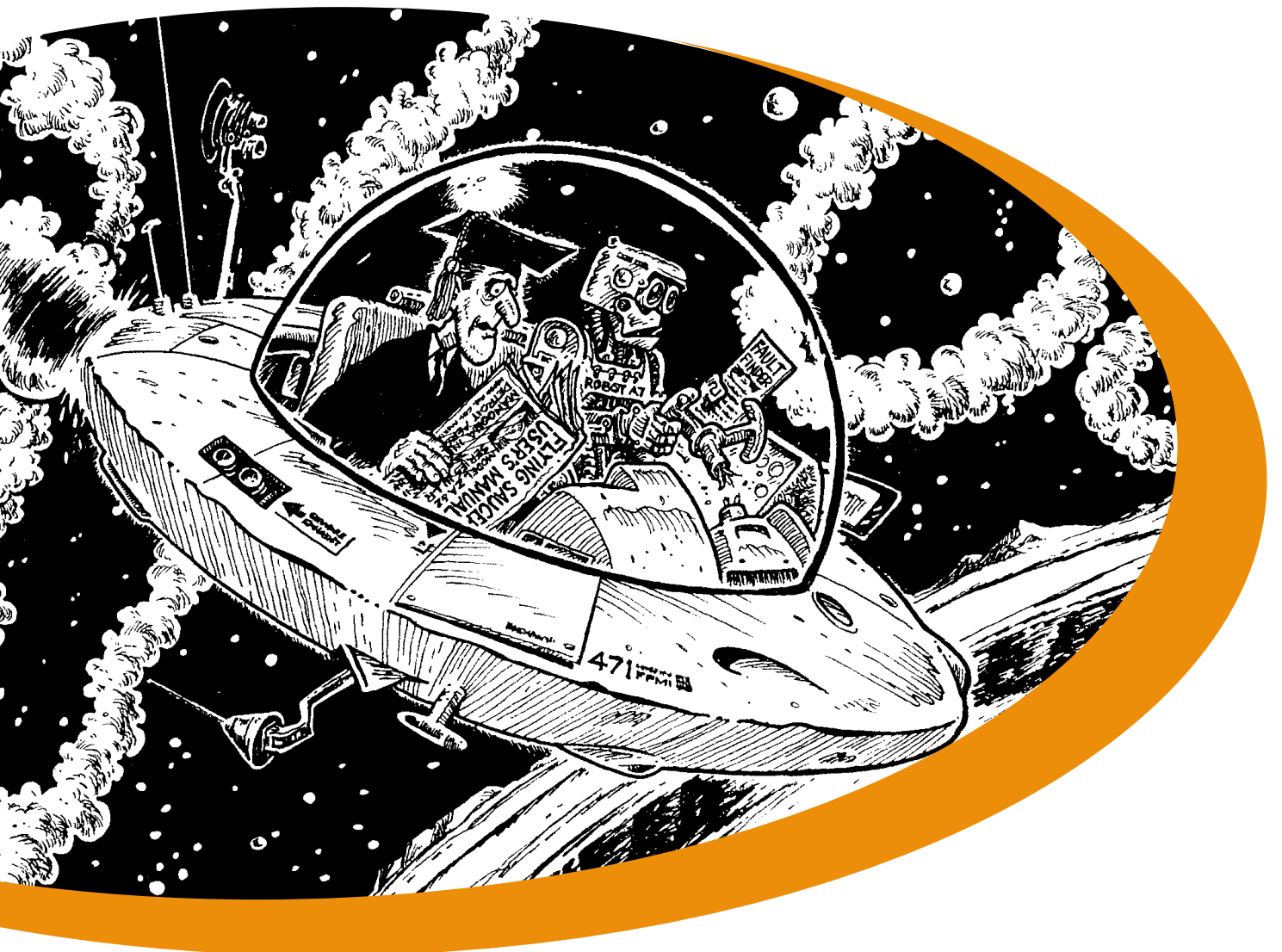


When Worlds Collide:

Changing Cultures in 21st Century Education



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Editor's Foreword

This publication captures the outputs of a JISC infoNet conference held in February 2004 in the Royal York Hotel, York. The event was entitled 'When Worlds Collide' because it aimed to explore the cultural differences between the different communities involved in developing and supporting learning environments hence the event was promoted in collaboration with ALT and UCISA. We defined learning environment in the broadest sense to encompass all of the structures, systems and processes that impact on the learning experience. For many this is summed up in the term Managed Learning Environment (MLE) although others favour alternative terminologies. The event was thus unusual in that it brought together people, from learning and teaching, MIS, library, administrative and senior management backgrounds, that don't often get the opportunity to network with one another.

Day one of the event took the form of a conference and you can find transcripts of the keynote speaker presentations towards the back of this publication. Day two of the event was a 'Think Tank' session where 60 delegates and invited experts debated a number of key issues arising from the conference. The outcomes of these group discussions are also reported here. The discussions reflect the views of a wide cross-section of practitioners. The event was sponsored by HEFCE and hence mainly targeted at English HE institutions but there were also a number of FE practitioners and institutions in Scotland and Northern Ireland represented.

It is a tall order to be asked to represent the views of 60 people, especially when the participants are such a diverse, articulate and committed group. With the help of copious notes and hours of video footage I have endeavoured to capture the broad sentiments expressed and I hope I haven't taken too many liberties with the detail. JISC infoNet and HEFCE felt there was real value in capturing the discussions because they highlight many of the key issues that institutions are facing in taking learning into the 21st century and this knowledge can help to shape future policy. The issues are likely to be with us for some time to come and the challenge for support organisations, such as JISC infoNet, is to identify and promulgate practical solutions. For those who want to find out more about the service and how to engage with it there is a brief introduction at the back of the publication.

The event did identify cultural differences and, most encouragingly, participants showed genuine awareness of the issues this causes and willingness to address them for the benefit of the learner. There was acknowledgement that the pace of change is alarming but great enthusiasm for facing up to the challenge and delivering quality education to a new agenda. Most of all there was a desire to capitalise on one of the great strengths of the education sector – its facility for collaboration – and to work together and learn from one another. We at JISC infoNet will do what we can to foster that community of practice and to ensure that the lessons learned from the JISC's extensive range of Development Programmes can benefit others.

Gill Ferrell
JISC infoNet

JISC
infoNet



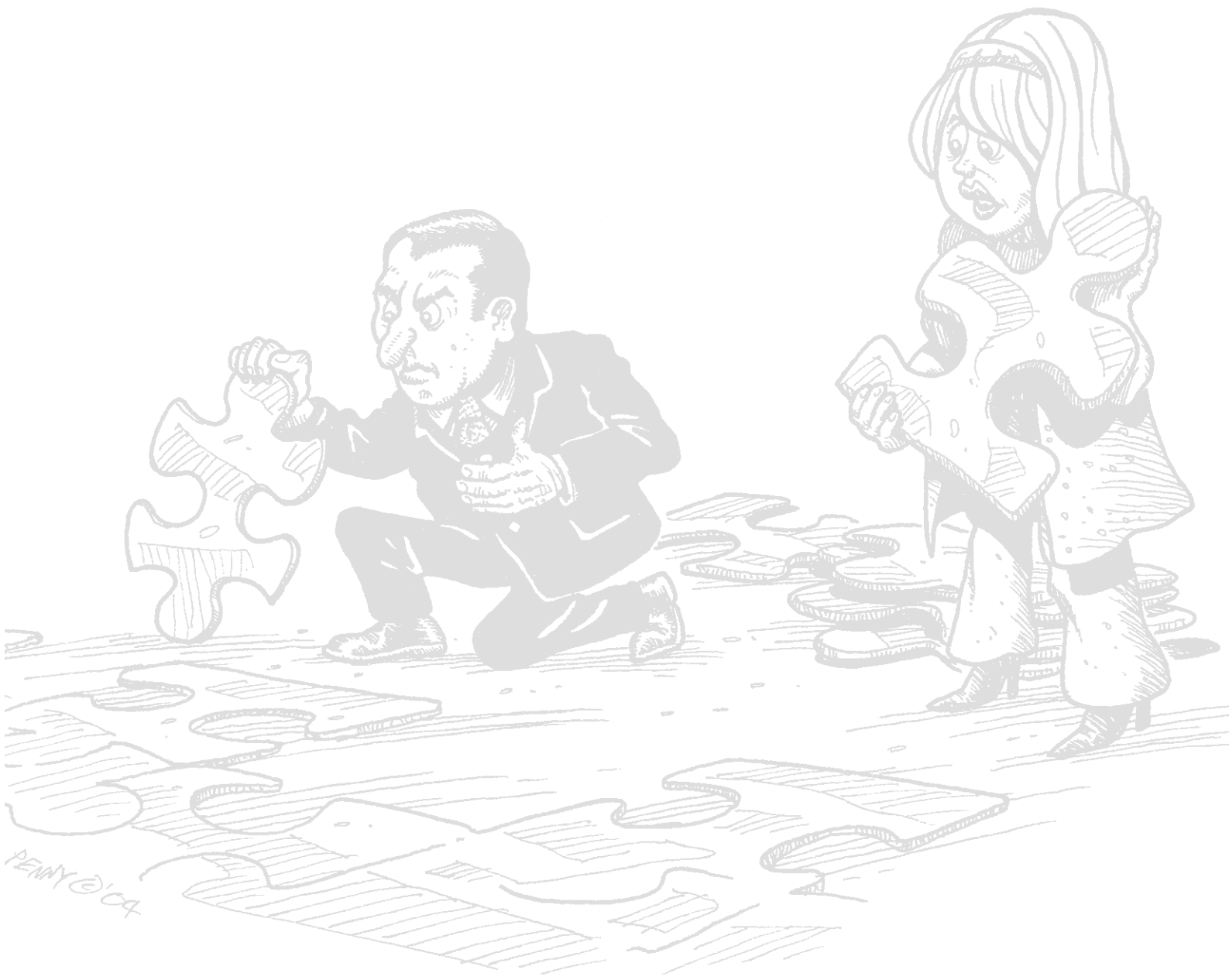
HIGHER EDUCATION *hefce*
FUNDING COUNCIL FOR ENGLAND

ASSOCIATION
FOR LEARNING
TECHNOLOGY 





Think Tank Outcomes



Customer focus

A set of learner, and learning, focused procedures

A robust but flexible HR infrastructure

Systems, processes, facilities, services and people

A glorified student admin system

We need to regard the MLE as a device to put the student first

Important to break down divisions e.g. academic support, library support and administrative support

Asking customers what they want and delivering it

What are the essential components of an MLE?

The term MLE has been in use for some years now yet it still defies a definitive description. Some see the term as unhelpful whilst others embrace it enthusiastically. There are clear differences in usage between FE and HE. In FE there is still a view, stemming largely from the 1999 BECTa statement 'MLEs are software applications that support on-line learning', that there will ultimately be a product that could be termed an MLE. Within HE however there is general agreement that MLE is a concept rather than a system.

The question was deliberately framed as "What are the essential components of an MLE?" to avoid what would inevitably be a fruitless debate about the perfect definition. The groups were asked to consider the 'essential' and 'desirable' components and the responses covered aspects both of functionality and key characteristics.

There was a widespread feeling that an MLE should encompass all of the essential elements of the core business and that equating an MLE too closely with the VLE misses out large chunks of essential administration such as Finance and HR functions and possibly also functions such as Timetabling and the Library. MLEs were seen as institution wide undertakings. It was also agreed that MLEs are about processes as much as systems and much was made of the role of the concept in linking the academic and administrative functions. The point was made that good management and academic excellence aren't incompatible although it was also noted that some institutions that are very strong academically are not always at the forefront of good management practice.

Participants noted the political sensitivity of some of these developments simply because they open up our processes to scrutiny and, in some cases, make explicit the mess we are in. Bad practice or poor quality information becomes visible to the rest of the organisation and to the student. Data quality is viewed as an essential component in making MLEs work. MLEs are seen as a driver for change but it was recognised there is a very real need for effective leadership and change management to achieve the expected potential. It was felt that MLE type developments have to be associated with a continuous improvement culture. Teaching and learning methods will have to change rather than simply re-presenting existing content. It was also recognised that roles and responsibilities might change as a result of changes in practice – one suggestion was that library staff may be more engaged in supporting lecturers with content services than giving direct support to students.

Some groups followed up the previous day's discussion about the differences between an MLE and a portal. Most participants agreed they were not the same thing although a well-designed portal may make the organisation appear more joined up to the student. The fundamental difference was summed up in the quote "MLEs should enable you to do things not just look at things."

A topic that arose again in later discussions was the idea of inter-institutional MLEs and of the concept being essential for the fulfilment of the lifelong learning agenda. Personal Development Portfolios came up time and time again and the need for us to be able to link them up both within the FE/HE sector and outwith the sector e.g. links to schools or the NHS.

A key characteristic that came up in all the discussions was the need to be customer focused. There was some debate about what this means, especially in relation to learning and teaching as some delegates held the view that we have gone too far with student-centrism and have forgotten what the role of the teacher should be. There was however a general consensus that students are customers and that our organisations need to be better aligned at meeting their needs. The example of the e-university was cited as one where development was clearly not well aligned to market demand.

Other characteristics that were deemed important included the ability to combine robustness with flexibility and security with simplicity e.g. single sign-on was a key requirement. People wanted to see a front end that was personalised, attractive and 'fun' to use. It was felt that systems should be accessible to all and ubiquitous (the 'Martini' concept). Open architectures and standards (such as IMS) were felt to be important so that new components could be plugged in seamlessly to ensure that systems would be sufficiently flexible to support an agile organisation. There was some debate about whether technology was actually driving the agenda but most participants agreed that the agenda was being driven by widening participation and that technology was providing solutions to the problem of delivering mass education.

Whether or not the term MLE will remain in use seems far from clear but it is evident we are talking about a concept that is more than just 'VLE Plus' and indeed that the concept may be realised very differently in different institutions. There were differences between participants who saw a reduced number of highly centralised systems as the way forward for their organisation whilst others strongly defended the inclusion of multiple VLEs within their MLE framework. The key to the concept seems to be about being 'more joined up' both in the sense of having integrated systems (however many separate systems this may involve) but also in terms of how we operate as organisations.

MLE isn't intended to have a definition – it's just a term to start people thinking

A driver for change

Systems that talk to one another

Integration of 'essential' services

Integration of academic and admin

One definitive source of data

MLEs should enable you to do things not just look at things



A Managed Environment for Learners

Single sign-on

Unique Learner Number

Where do we want to be in 5 years' time and what benefits do we expect to get from this?

The group declared that we want Lifelong Learning to be a reality: not because the government wants it but because it is good for people. There was a feeling that we should be able to realise the potential of lifelong learning for everyone who wants it. The term MLE was rejected in favour of a Managed Environment *for* Learners.

There was a strong push for seamless collaboration between institutions. Participants wanted to see coherent intra and inter institutional services with single sign-on, a Unique Learner Number and Personal Development Portfolios. There was a feeling that we should be endeavouring to ensure that the most appropriate institution delivers the best course to the learner regardless of whose course it is. This was felt to be about having confidence in the products and delivering them in effective ways. This means a move away from using ICT as a communication tool towards using it as a collaboration tool. Participants wanted to see interoperability of both student data across institutions and content across different VLEs so that the best teaching resources can be shared. This was deemed to be beneficial both in terms of supporting lifelong learning and in allowing institutions to access new markets.

Mix and Match components

Skills to learn 'Just In Time'

Games mark the new generation gap; it's not music any more

Borderless education



Participants showed a remarkably relaxed attitude towards institutional mergers and were keen to be part of regional and global networks of learning providers. The two were seen as connected with regional consortia being necessary to compete in a global market. Examples were raised (e.g. De Montfort University) of institutions outsourcing large quantities of learning to commercial companies.

In some cases it was taken for granted that this vision for the future would mean all institutions having an MLE and the emphasis of the discussion was on the nature of course delivery rather than the underpinning infrastructure. Many examples were given (e.g. France, Norway, Slovenia) of where there was a single type of system and hence systems issues were not cultural issues. The view was that MLEs could support differing institutional missions and that cross-institutional MLEs could work. The group did not want to see institutions becoming more similar and there was a feeling that greater collaboration and distinctiveness of Mission were not mutually exclusive objectives.

There was considerable discussion about the education market. It was recognised that we operate in an environment that has seen remarkably little competition so far although the introduction of top up fees may change this. It was felt that the values of the market place are not entirely appropriate for learning and although there is a drive towards giving students what they want (anytime, anyplace, anywhere) the education sector requires some form of protection from becoming a strictly market driven economy.

This raised the question as to what extent we really have a vision for how MLEs will impact the future or whether we are indiscriminately following fashion because we are afraid of being left behind? Some expressed the view that where we want to be is irrelevant and that we should be looking instead at what forces are driving change.

The entertainment industry was seen as a key factor in altering people's relationship with technology. As one participant put it "Games mark the new generation gap; it's not music any more." The overwhelming view was that there is no longer any such being as the 'traditional' student. Institutions will need to understand the needs of different types of learner and work to ensure accessibility and transparency for all.

The discussion on where we want to be led inevitably to discourse on the nature of learning. The 'Martini' concept popped up frequently throughout the day. Participants wanted to see barriers to innovative and creative learning and teaching removed so that learning could be learner-centred, flexible, negotiated, formal or informal and mobile. There was a desire to see students learning collaboratively and effectively with an end to 'boring mass lectures' or their electronic equivalent. There was an expectation that academics would have to engage with learning technology and that this would become a core skill for the teaching profession. Technology was seen as a facilitator with 'push' technologies being able to match delivery to ability although there will be a continued need for personalised learning support services. The shift will be from 'fetch it' to 'deliver it.'

'e' as an integral part of learning

Changed business processes, cultures and attitudes

Increased institutional responsiveness

Supporting global communities of practice

Breakdown of silos is a must!

We want to be in a business we still believe in

The real question is where we want to be in 10-15 years time? The next five years is consolidation and then the next steps will need to be ...

Cardigans and Anoraks

Dead weight of infrastructure/ processes

A lot of government stuff

Do we need to change something or are we on a journey?

Senior management unwilling to lead especially where technology is concerned

Layering of new on top of dysfunctional processes

What are the barriers/issues to achieving these goals?

The barriers were summed up as those of ‘human nature writ large’ when it comes to resistance to, and fear of, change. It was however felt that there were particular cultural issues associated with the education environment.

There was discussion about the lack of overall strategic vision and a feeling that the various institutional strategies were not usually sufficiently connected. The point was made that strategies should be up-to-date, agile and appropriate but in practice they are often written to acquire funding in a particular year then disregarded. It was felt we often lack real institutional focus about what we want, where we are going and where e-learning fits in. In some cases we were seen to be putting in solutions without evaluating the problem.

Government initiatives were similarly described as well-intentioned but poorly thought-out. Micro-management in terms of accountability to legislative bodies was felt to stifle innovation. The term ‘an audit too far’ came up more than once just as the term ‘over-managed and under-led’ was applied at the institutional and national levels.

The issue of leadership came up a lot in the discussion. Michael Zastrocky in a recent Gartner survey highlighted that good leaders need a sufficient level of IT awareness for the rest to follow yet this awareness does not seem to be particularly valued in education. The phrase ‘chauffeur-driven PC’ was coined. Many participants felt that there is a real need to raise the IT awareness of institutional leaders. UCISA is also currently lobbying the Leadership Foundation to remember that leadership is not solely the preserve of the academic.

Organisational structures and processes were seen as key inhibiting factors. It was felt that we design structures and processes with the focus on the organisation rather than the learner. The existence of silos and an academic/administrative, or department versus centre, divide was noted. We exist in complex institutions and there can be many conflicting agendas. It was felt we do not have the leadership to address the cultural differences for the benefit of the organisation and that too often compliance with institutional directives is ‘optional’. A point that came up many times during the conference was the fact that all too often we try to layer the new on top of dysfunctional processes. It was also stated that senior managers in particular are stuck in an old paradigm and any change to structures and processes is focussed on a narrow view of savings rather than on improving the process for the benefit of the learner. The ‘efficiency’ of widening participation should also be recognised. The endemic nature of organisational restructuring was seen as one of the factors causing many staff to suffer ‘change fatigue’.

It was recognised that there is still more kudos and reward associated with research than with good teaching. A possible solution to this was to characterise learning materials as valid research output. It was noted that research outputs don’t get published until they have been through some form of peer assessment but staff are reluctant to subject their teaching materials to the same kind of scrutiny. Similarly, staff are constantly asking for examples of good practice in the use of VLEs but are notably more reluctant to share their own experiences. Viewing learning materials as research was felt to be a potential solution to the copyright

and IPR issues surrounding such material as it would make lecturers keen to share their outputs. The research culture was also seen as a barrier in terms of being willing to invest staff time in other things.

The age profile within HE is markedly skewed, one participant came up with the figure that 50% of staff will retire within the next 5-10 years, and this is particularly true of senior managers. It is felt that the age profile may be a factor in preventing us getting a true learner focus and understanding how the widening participation target audience likes to learn. Student expectations are formed by their familiarity with technology yet many people still want to teach in the way they were taught. A variety of different attitudes to learning are discussed in a publication by Diana Oblinger (Boomers, Gen-Xers and Millennials: understanding the new students, EDUCAUSE Review July/August 2003). Another example was given of how young people in Japan refer to themselves as 'Oyayubi Zoku' which translates as the 'Thumb Tribe'. This refers to an increasing tendency for young people, accustomed to text messaging, to use their thumbs in different ways to the older generation e.g. for switching on lights. It was also felt that HE is predicated on all students starting at the same level (A level) as their entry point.

Libraries came in for some criticism (mainly from the librarians in the group) as being inflexible and concerned to hang on to control. The Internet Café at Glasgow Caledonian University was cited as a good example of giving younger students an environment in which they like to work and where noise and collaboration are encouraged.

Technology was suggested as a barrier but most groups concluded that this was a red herring. Although there are a number of issues surrounding interoperability, vendor lock-ins and the pace of technological change, it was felt that technology is overall an enabler rather than a barrier. We need to make appropriate use of technology without being led by it but it is not enough to understand the technology - we also need to involve others who understand other aspects of

Luddites

Well-intentioned but poorly thought out government initiatives

Professional snobbery

Too much management and not enough leadership



If you put in technology you get a faster mess

There is a tendency to follow functionality and leave out strategy

Central departments are like sewers: nobody notices them until something goes wrong

the business. Technology does influence strategy but shouldn't dictate it. Participants considered how the increased use of technology fitted with the widening participation agenda and concluded that this was unlikely to have an effect on the economically disadvantaged. Mobile phones, satellite TV and the rise of the games industry were all cited as examples of how technology pervades all socio-economic groups. The issue of patchy Broadband coverage was however seen as a major issue affecting access to e-learning.

Resourcing also came up as an issue but this seemed to be as much a question of priorities and allocation as of overall resourcing. In many cases staff time is the main resource issue. The point was made that HE spends millions on IT now but this money simply didn't exist 20 years ago when we first started using PCs. Somehow universities and departments have found the money for PC budgets. Although up-front development costs of e-learning and MLE type developments are high, it seems the real issue is that we fail to follow through and achieve adequate returns on that investment. The point was also made that we do need to take a long-term view and it did indeed take many years before we gained efficiencies through use of PCs.

Success was also seen as a major barrier as it tends to engender an attitude that says "We are doing things well at the moment so why bother changing?" This was seen as a short-sighted view that stems from a fear of change or a feeling that all change is a bad thing.

There are practical as well as perceptual issues to be addressed as part of managing the change and the nature of staff contracts came up as one barrier. The calculation of workload in HE (and for FE statutory returns) is measured in terms of contact hours which does not sit well with e-learning.

Cultural resistance to change was seen as something that could be overcome if the above issues were addressed. Key to this is how the change is managed and presented to gain ownership. A view from many of those who had made progress with MLE developments was that too much time was wasted on laggards and it was better to expend effort on early adopters and champions to ensure success.

What do we need to overcome the barriers and what recommendations do we want to make to the key bodies who can help us?

Participants wanted to see clear, appropriate and joined up strategies that don't try to address too many things at once. They felt that these strategies have to be based on reality and come from within rather than be directed from elsewhere and they criticised the 'strategy culture' that currently exists. There was a desire for institutions to know what they are good at as well as where they want to go and not base plans on an illusion of what the institution is really like. Staffordshire University was cited as a good example of an institution with a clear strategy that evaluates what it is doing when it doesn't succeed. The comparison was made with institutions that go 'once round the loop' then shoot off in a different direction when things don't work as planned. It was felt that the JISC could help with guidance about developing and implementing strategies.

A number of HR issues were raised and it was thought that HEFCE could help us move towards greater consistency in the terms and conditions of staff contracts and modernisation to ensure they reflect reality. A belief was expressed that the HR function is under-rated in the sector and that the level of investment in staff development is poor. Participants welcomed HEFCE's involvement in strategic staff development initiatives but felt that it needs to undertake a thorough evaluation of the impact of senior management development programmes and to encourage a strategic approach to staff development at all levels. They expressed the view that the Leadership Foundation should encourage appropriate risk taking in its management development programme. Mentoring programmes pairing senior managers with business leaders were also suggested.

Participants believe the cultural issues are not intractable. There was a strong view that culture stems from behaviour and if you can change certain behaviours (whether or not staff believe in what they are doing) those that come after will do likewise. It was noted that De Montfort University has achieved some success by Deans saying to staff "These are the behaviours I want from you" thus cutting through the different agendas. Leeds Metropolitan University similarly obliged academics and support staff to work together and set aside time each week for this collaboration. Essential to this is the need to convince leaders that the main issues are not technical ones. It was recognised that some staff would never get on board with the changing agenda and the age profile of the workforce was seen to offer opportunities in terms of bringing in new blood.

Boards of Governors were suggested to be the main bodies that could convince institutional leaders to change. They are fairly invisible to most staff but important to senior managers. There was some debate about how much pressure Governors are likely to exert and examples were given of key business leaders on governing bodies whose experience has little impact on the institutions they serve. There was a feeling that governing bodies are often made up of 'local worthies' who will not pose a challenge to academic leaders. It was felt that HEFCE should find ways to engage with governing bodies to promote good practice.

There was a request for models of good practice to enable people to challenge bad practice or accepted ways of doing things. There was also a need for examples of poor practice (which could be anonymised) or open assessment of situations

Genuine recognition for innovation in learning and teaching

A sensible, coherent and stable funding model

Enhanced pensions for dead wood

Models of good practice and anonymous examples of bad practice

National information system solutions

Leadership that's about making outcomes happen not about process

Nationally negotiated IPR, copyright and licensed access to resources

Platform independent solutions

Mentoring programmes for senior management with business leaders

External bodies to be better at giving clarity about what they want

Recognition of value of teams of mixed skills

Evaluation of impact of top management development

Staff contracts and reward mechanisms for all

where things had gone wrong. The University of Cambridge was praised for its courage in being open about the issues with its CAPSA finance system implementation. The University of Teesside finds it helpful to give advice on 'Don'ts' as well as 'Dos' and has a list of '10 things not to do with Blackboard' on its staff intranet. JISC infoNet was seen as a key player in the dissemination of good practice by embedding the learning into its infoKit series.

There was a desire to see real innovation in learning and teaching appropriately recognised and rewarded. This would involve valuing innovative teaching as well as research, providing funding for development and ensuring better dissemination of results. It was felt that we merely pay lip service to recognising teaching innovation at the moment.

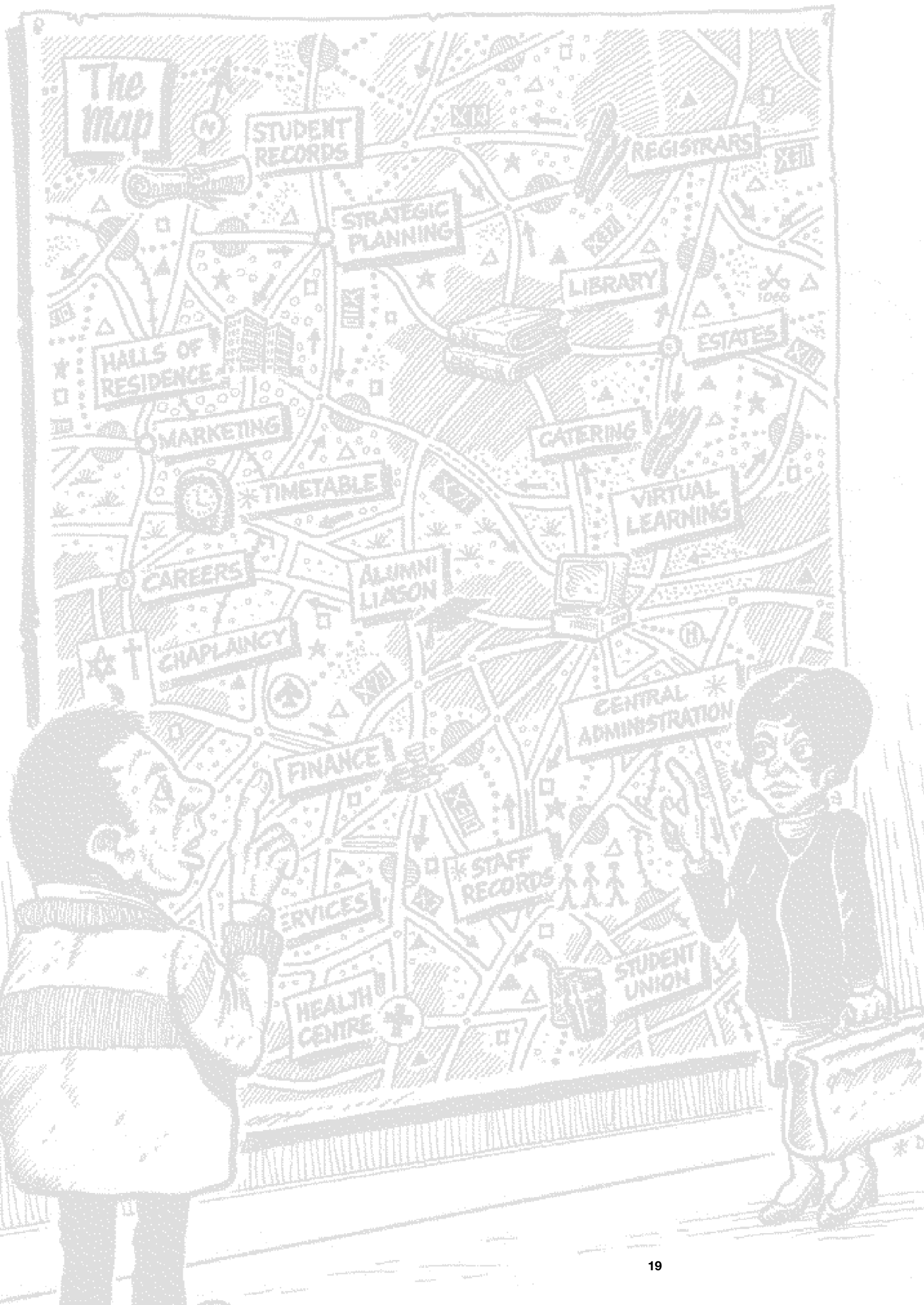
The feeling was that we should take the debate away from the technical and focus on the learner. Participants wanted to see the emergence of a new style of IT Director who has the business at heart and is a member of the senior management team. It was felt that there should be more dialogue with students and that perhaps JISC could involve the NUS in some of its initiatives to ensure that we understand the needs of the modern learner. Bodies such as UCISA and SCONUL will also need to build that understanding into their staff development programmes. Delivering the programmes of the Leadership Foundation by e-learning was also seen as a means of raising awareness and leading the way.

It was felt there is a need to review statutes to ensure that copyright laws are sufficiently flexible and up-to-date to cover electronic media. There was also a request for national negotiations on copyright and IPR and the creation of a genuine central repository of resources. It was further suggested that the BBC could do more to make educational resources freely available.

The close working relationship between the Scottish Funding Councils (SFC) and Scottish institutions was praised as was the way in which the SFC got institutions to collaborate to gain ICT funding. Participants would like to see the funding bodies encouraging collaborative partnerships. It was recognised that the greater number of institutions in England may make it less practical to have exactly the same kind of relationship with HEFCE but the model was still felt to be a good one. Participants would like to see HEFCE pushing for change by funding some Business Process Review initiatives in the same way it promoted HR strategies.

Finally, it was suggested that we need to be more visionary in our thinking. As one participant put it, "JANET seemed impossible". The idea of joint national programmes across funding bodies was welcomed.

Speaker Transcripts



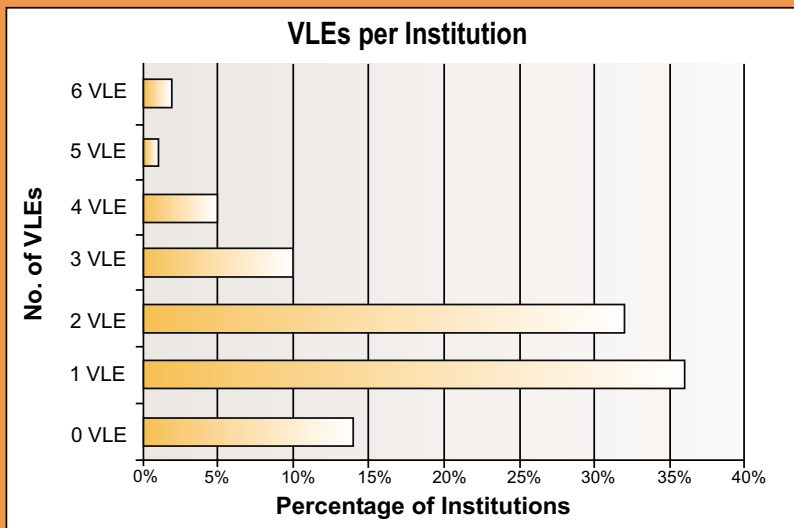
Tony Dickson

Things to Come

Conference Opening Address

I have been given a brief to look forward a little and to say some things that might provoke (and upset) some people and provide some fuel for discussion later on. What I am going to try and do is give some headlines about where we currently are in HE and say something about where Northumbria University is on the MLE journey. Most of you are undertaking this journey in different ways and at different stages, so I'd like to outline some of our work and our mistakes and to provide, based on my experience not just as a senior manager at Northumbria but working with large technology companies, some helpful hints. I'll also say something about things to come - although you will know how good predictions are in IT! I'm a social scientist and you also know how sound social science predictions are - so make of them what you will.

Where are we now?



Source: UCISA 2001-2003 Longitudinal Survey, Tom Browne and Martin Jenkins

Where are we now? Interestingly a recent UCISA survey suggests that we are still, in many cases, into multiple VLEs. The survey was done in 2002 and you'll notice there are some institutions with four, five and six VLEs. If any of you are out there, I know some very good counselling services! I think the reassuring thing (at least it's reassuring for me) is that if you look at some of the Gartner research from the States, which tends to be slightly ahead of us in some respects, there is a clear trend towards an enterprise-wide VLE, one or two at the most, which makes a lot more sense in my experience.

VLEs thus far are primarily used as adding some form of learner support. In other words, despite predictions to the contrary about five years ago, they have

not as yet really begun to play a radical role in relation to how educational institutions go about their everyday pedagogical practices. Instead, VLEs have added to existing practice and changed it in some ways but this has not yet led to radical change or major substitution. I'll come back to that later on.

The UCISA survey also revealed that there is some integration between MLEs and other systems although I'm not actually sure what high integration between MLEs and other aspects of MIS might constitute with current systems. Again I'll come back to that shortly.

One thing I want to say, certainly based on my experience of working for some big technology companies and the things they tell us and how they sell things to us, is that enterprise (ERP) approaches are certainly not proven in the sector in terms of return on investment. If you look at the case studies used by most of the vendors and apply them to both HE and FE you'd be hard pushed in retrospect to get a good business case or return on investment case for most of the big systems which many of us have bought and implemented. I guess a lesson from that is we need to work harder going forward at defining expected ROI and deriving maximum benefit from expensive IT systems.

Deriving maximum benefit is constrained by the fact that, at the moment, although I think this is changing quite rapidly, proprietary systems outnumber common standards. The weight behind common standards, for example SCORM and IMS, is starting to change this but integration, for example, is still bedevilled by stand-alone systems which don't talk easily to each other.

We at Northumbria are somewhere along this journey. We do have a single VLE which is Blackboard version 6. We have gradually, over the last three years, come to this situation. We had a number of VLEs, some bought in, some invented by technos and nerds scattered around the University (and very bright some of them were) and we have gradually turned off, bullied, shut down and eradicated those systems. I wouldn't say they're actually 100% gone but the vast majority of the University now uses one university system. We have about 30,000 users including 800 local staff users and it also supports 2,000 students on Northumbria courses in other countries. We have integration between some aspects of our MIS framework, including the timetabling and library systems. Integration with other systems is at an earlier stage.

We are also in the throes of a long, painful, and costly Oracle implementation of a Student Admin and HR system. We have a university website which is underpinned by a Content Management System, which makes things easier and quicker and helps in all sorts of ways. We are, like many institutions, evaluating a Learning Content Management System at the moment and expect to have chosen and integrated one for the start of the next academic year. Finally, based on our experience, our scars and our mistakes, we created, about a year ago, our own subsidiary, Northumbria Learning. Northumbria Learning acts as an ASP to provide a range of on-line education services, including a hosted Blackboard system, to a range of customers in HE, FE, Training Providers, and Learning & Skills Councils. It currently has about 30,000 users on the system but is growing very rapidly. If anyone wants a hosted, trouble free, 24x7 system I'll be happy to take your orders!

Helpful hints (at least I hope they're helpful). The first is - don't invent your own. I've been in the system a while and I've looked at lots of systems that people have invented - I even remember HEFCE trying to invent systems. The reality is that 99% of them have been unmitigated disasters and it's unnecessary in my view. There are lots and lots of bright people in our universities, but in commercial companies there are lots and lots of bright people who are paid to produce robust



About the Speaker

Professor Tony Dickson is Deputy Vice-Chancellor (Development), Northumbria University and Managing Director of Northumbria Learning. He has previously held senior posts at Paisley University and Glasgow Caledonian University. At Northumbria he has led the development of the University's web presence, e-business capability, and e-learning strategy. He has also worked extensively with both public and private sector organisations on e-business and e-learning issues. This work includes being a founding member and Director of Smart Isles and Northern Informatics, both early adopters of e-business solutions; acting as Non-Executive Chairman of AskHow2, a start up company offering web based solutions to business; and undertaking consultancy for organisations that include Sun Microsystems, Hewlett Packard, BT, and Kodak.

systems. They don't always get it right but where they are commercially robust in my experience it's much easier to use those than re-invent another one.

The second issue bedevils HE in particular and it's about defining what is the acceptable threshold for system functionality and performance and then managing the expectations of users. My experience of many universities is that we start out by saying, "We could do with a system, let's get the users together and ask them what they would like." That's a fine democratic principle and seems like the sensible thing to do. However, what you normally finish up with is an over-specified, incredibly complicated system that nobody can deliver no matter what.

What we are bad at doing is saying what it is that we absolutely need and what is the threshold acceptability. What we get above that threshold is then a bonus but we do need to define that acceptability threshold. A notorious example is when we at Northumbria invented a new Marks Recording System in the University just as we modularised our programmes. It could have taken the next three generations to deliver that system because of allowing every user to specify everything they ever wanted.

However, it is also prudent, again based on my experiences of working for and with technology companies, that you never believe anything they tell you about system performance and functionality. You need to go and visit sites where things work and talk to the people that have to a) operate them and b) use them. That leads us on to the next hint (and we have scars in this respect as well) - don't buy 'vapourware'. It's amazing how software providers can give you exactly what you want. They never actually have it available now, it will be just around the corner, and if you sign up with them you'll get the system at some time. It almost never happens and if it does it takes longer and costs you a lot more than the numbers that you first thought of.

The next one is - and some of you know this very well but universities are really reluctant to take it on - if you're going to buy enterprise-wide systems it's no good buying them and slapping them onto your existing processes and your existing ways of working. If you want to get benefit from them you have to re-engineer the processes and change behaviours in order to maximise the benefits. Now, I know the ideal maxim is, "No, no, no it's usability that's supposed to drive the system" but the world of IT systems is not like that. Those of you with new systems like SAP will know precisely what I mean. You cannot just put it on top of what you do and hope it improves your practice - it will just be a more expensive way of doing things just as badly as you were doing them in the first place. You need to take on the issues surrounding behavioural change and process change at the same time as you are integrating systems.

The last piece of advice, as I think there is an unstoppable trend towards enterprise wide systems or university wide systems, is that they need strong support and endorsement from senior management. Making systems available to the community to use or not is, in my view, a recipe for disaster as some people do use them and some don't and you finish up with mangled data, inconsistent information, and systems that don't talk to each other. There needs to be a very strong input from senior management.

What about going forward? This raises an interesting question if we go back to what I said earlier on VLEs or MLEs. So far their main use has been really about

adding support – they are not really substituting a different pedagogy or reducing cost in a major way. I think that will change, for reasons that I'll come onto in a moment. Meanwhile, there is a very interesting set of pedagogic questions about how we make a shift - both in delivery and in learning support, from supporting e-learning to majoring on e-teaching and its different implications. We've only begun to think about that kind of shift.

One thing that has become really important and accelerated over the last couple of years is the focus on learning resources as core to what you get access to with VLEs – what I would describe as their 'knowledge navigation' capability. For example, if you have seen the Tomlinson recommendations they point to another reason for how that issue will be really forced by students coming through from schools with experience, a set of core skills and a familiarity with going out and searching for certain sorts of information quickly. It's becoming critical to the way we use VLEs at the moment and will become more critical. Learning and discovery and resource tools for learning resources in the next 3 or 4 years will be really important.

However, in my view, in the very near future universities will not be differentiated by the technology they use. Technology will be largely embedded in what we do. That's in effect what we find now about on-line learning resources. They are a part of what we do and how we support learners. The differential will be how well you use whatever technology you have to support learning and customers. I emphasise the customers because it's not just about supporting learning - it's how you also hang onto the learners through the system you use. User support will become a key differentiator in universities.

This leads onto the next question which is, "Will e-learning become one of those terms that was used for a while and then disappears because actually it's just an embedded and integral part of how we go about our business?" I think that's very probably the case. Since 90% of all HE institutions reviewed have at least one VLE in operation - quite quickly they will just be a part of the support services we offer to our learners in different ways.

The next one is something I've touched on earlier. We did a recent analysis at Northumbria and we believe, we spend about 10% of our turnover on IT. That's over £10 million a year - by IT I mean hardware, software and people. It's a big investment. I don't think we've been very good, and I think the sector as a whole has been really bad, at working out what return we're getting on that investment. How has it differentiated us from our competitors? How does it add value to the learning experience? How do we judge value for money?

The next issue, which I think we're all grappling with in different ways, is how do we deal with the shift from on-line learning or on-line learning support, to on-line certification? There are some critical issues along the way, not least verification. We host, at Northumbria, the JISC National Plagiarism Advisory Service which continues to develop interesting ways to try to ensure that we can verify the learning that is taking place by the learner that we've registered and wish to accredit.

Finally a set of issues around global demand and e-learning. Looking at recent projections on world demand for higher education in the next 20 years - there is

recent work by the World Bank, by OECD and an IDP study which are based on reasonably sound demographic projections (because most of the learners are already born), so you can make some reasonable statistical predictions. All those studies suggest that in the next 20 years the demand for tertiary education around the world will sky rocket and increase at a frightening rate. That is great news - there can't be many business sectors that can confidently state something about rapidly increasing demand in the next 20 years! We're pretty damn sure that demand is going to increase substantially. I think in practice it will be lots of good news for everybody in HE in terms of how things will develop.

It occurs to me that there are two major things which are already around which will develop much faster over the next 20 years and will lead to some interesting changes in the sector. The first is that increased demand for tertiary education cannot be funded wholly by national government. No national government can afford that amount of demand growth. As a result, one of the things that's already happening, is the growth of the private sector as providers. This occurs in many countries. Those private sector providers will inevitably use on-line learning or on-line learning support as a key feature of what they do. Now I can guess that some of you will be thinking, "Well there are already some well publicised big failures in HE of those universities who tried to make a new business out of on-line learning". There are of course, mostly in the States. My view about that is they were badly planned, badly thought out and commercially naïve. Some of you may also know other examples such as the Apollo group and Phoenix University who have so far been incredibly successful by being customer focused. Delivering learning how it's required and when it's required, in the form it's required, to the learner will be an accelerated process around the world.

National governments will not be able to afford to fund massive increases in demand for tertiary education. Traditional face-to-face tuition based processes for delivering education will also not be able to deliver that growth unlike e-learning which has on-line learning support at its heart and which increasingly places less emphasis on traditional face-to-face tuition. That will be a challenge in all countries. Our little local debate about differential tuition fees in this country is a very small example of global trends which will disrupt traditional education providers. Those providers who will thrive will be those that use systems and technology to be excellent at learning support and customer support and many of those will be in the private sector not in what has traditionally been the public sector.

Just to place all of this in perspective - Oscar Wilde, as always, had something to say about mistakes and experience. His well-known quote, "Experience is simply the name we give to our mistakes" is a good guideline for us. However I was also given a brief to do a plug for JISC infoNet. So, the essential difference between Oscar Wilde and the sector is that we hope that the JISC infoNet service will enable the sector to try and avoid some of the worst mistakes which some of us have already made! It won't stop everybody making mistakes in the future but if it provides the right resources for good practice dissemination it may play a small part in helping the sector to move forward and adapt to some of the challenges that are apparent.

Questions

If a whole university adopts a single commercial VLE how will it be susceptible to them (the supplier) controlling the whole future of e-learning?

Tony Dickson: At Northumbria we adopted a particular VLE after evaluating a number of them and we have a rolling evaluation not just of the one we use but of what's happening in the market place. We are quite clear about the possibility in the future of shifting out of where we are into something else. We hope not to do that, for obvious reasons, because that's a big shift. We also work very closely with the VLE provider to try and make sure the system develops in ways that are most helpful to us. It's a risk you take but in my view there are bigger risks in having multiple installations and trying to make them work consistently across the University because in reality they almost never do.

If you pick one VLE does it give you sufficient flexibility to plug in and talk with and use other best of breed systems that you use in the institution?

TD: We haven't found that a major problem. We have a much, much bigger problem integrating our systems with Blackboard but it's nothing to do with the system or the technology - it relates to my point about the processes and people. Our problem is that we don't have one consistent accurate data set that is used in all our systems. What happens is people draw and use information from different systems and then feed it into Blackboard. What you find then is people are using different cohorts of students, different lists, different ways of categorising them and the students then say, "I'm not on the system, where am I?" They think it's the system's fault - that the technology is wrong. It's not the technology at all, it's because we don't have consistent data and we haven't trained everyone to manage it in the right way. There are certainly technical issues but they're not the impediment to doing things well - it's the people and culture problems which still bedevil us.

VLEs often start because academics want to provide something for the students. If you move to a single VLE how do you stop that happening? How do you advertise the VLE and get them to support it?

TD: What we did, when we evaluated the different VLEs and chose Blackboard was not very much to do with technology at all. It was because we anticipated where we were going as a university once we'd chosen a VLE. In order to justify that and make it happen we had to have a user-friendly system - we had to have a system which students and staff could get on and use easily and not find technically complicated. In the end that was the key differential. We got the users involved in evaluating the system so they felt that they'd made a contribution and then we put a lot of effort and resource into training staff as quickly as possible around the institution and supporting them with help lines and whatever. The rollout of Blackboard for us in terms of adoption went very, very well. A lot of people began to use it very quickly and as soon as they begin to use it you've got a benefit because, for example, you've got a group of students saying to members of staff, "I do a Cultural History unit and all my teaching materials are on Blackboard. Why is your unit not on because when I can't come in on Thursday, because I'm working in the pub, I'm not going to be able to pick up the stuff?"

Lecturers have pressure from the student learners to do that and that's worked very well for us. Over my career I've made a number of decisions where we've said we're going to have a University system and mostly you get predictable flak, heckling, anonymous e-mails and so on and so forth. I can honestly say the decision to pick Blackboard and roll out didn't take on any of that. We were able to provide a University system with support that they could get on and use quickly and the vast majority of people found that liberating. It wasn't a threat. We still had the odd technical nerd playing around with modifications. We tried to encourage them to do that off the system and if they've got something good tell us about it and we'll try and incorporate it. If you want to change it, go through us and we'll try and make it better so I think it works pretty well.

Grainne Conole

The Empire Strikes Back

Organisational culture as a facilitator/inhibitor

The MLE topic is one that I am extremely interested in and have been involved in for a number of years including working on the Creating an MLE infoKit. The heart of the issue, as we all know, is it's not the technical aspects of MLE development that are difficult (although they are difficult to a degree) it is much more about softer issues, the culture issues, that cause the problems. That has come out as a lesson time and time again. The other thing that has become very clear from MLEs is they make explicit what was not explicit before: the fact that our organisations are actually in a bit of a mess in that we don't really understand our structures and processes properly.

What I'd like to talk about is some of the things that came out of looking at the organisational aspects through the work of JISC MLE projects especially the 'Building MLEs in HE programme'. I'll try to pick out some of the helpful hints that you might find useful if you were looking at this yourself in terms of trying to better understand organisational context. I'll begin though by reflecting a little bit on how we got to where we are. Our universities and colleges are very different from how they were fifteen years ago. ICT is now definitely having a major impact and across institutions we are aware of that horrible phrase to be 'mission critical' within our institutions. I want to pick up a little bit on how and why that has happened and then end by reflecting in terms of some of the lessons that have been learnt from the work that has been done to date and where we might go from here.

It seems to me that there are a number of key questions we need to ask if we look at organisational aspects. What do we mean by organisational context? That's actually quite a hard question to answer; it's quite a nebulous concept. Trying to understand models which describe organisations and understand nebulous processes has come out very strongly from the MLE work. I'm going to point to some examples of what people have been doing to show that if we can understand our organisations, we can relate that to how it impacts on our MLE developments. We can also understand what the kind of issues are, what impact they are going to have and how we might best integrate that.

Just to reflect a little bit on how we got to where we got to - I think it's quite clear that ICT is having a major impact in our organisations far more than ever before in teaching learning and administration. MLE developments highlight that very clearly as cross-institutional and major initiatives in terms of bringing together different parts of the system. Why has it shifted so dramatically? To me there are a number of things that we can point to. We were talking earlier on about the HEFCE 'Good



About the Speaker

Professor Grainne Conole (BSc, PhD, MRSC) is Professor of Educational Innovation in Post-Compulsory Education at the University of Southampton, with research interests in the use, integration and evaluation of Information and Communication Technologies and e-learning and impact on organisational change. She was previously Director of the Institute for Learning and Research Technology at the University of Bristol, a centre of excellence on the development and use of Information and Communication Technology in education. She has extensive research, development and project management experience across the educational and technical domains. She serves on and chairs a number of national and international advisory boards, steering groups, committees and international conference programmes. She has published and presented over 200 conference proceedings, workshops and articles, including over 50 journal publications on a range of topics, including the use and evaluation of learning technologies and is editor for the Association of Learning Technologies journal, ALT-J. Grainne was a section editor for the JISC infoKit 'Creating an MLE'.

Management Practice Programme' - there have also been a lot of other initiatives in the last ten years. A lot of these have been funded by the JISC in terms of exploring and developing ICT and have allowed us as a sector to experiment and develop things. I don't think any of us doubt the impact of the arrival of commercial VLEs, whatever we think about them. For good or for bad they have had a major impact in our institutions because they enable practitioners to experiment and explore with developing on-line courses. They provide an easy all-in-one, one-stop-shop for creating and managing courses and that also has an impact at an institutional level in terms of the practitioners saying, "We want a VLE."

I remember at Bristol the people in Learning Technology Support Services tearing their hair out saying, "Lecturers are saying to us, 'Which VLE are we using?' Which one are we using as an institution?" Senior management were saying, "We don't want to make that decision yet" but it forced them to actually think about it and it got onto the various committee agendas and it got discussed and taken forward. I know that will be repeated at a lot of other institutions as well. Following on from that, having had a play at VLEs, it then raised questions about, "Why can't we link in to student records, why can't we link in to the library and why do I as the lecturer have to type in all the names all the time etc?" Hence the emergence of the importance of MLEs arose. I think this is a very exciting development for us as a sector. I do think ICT has become mission critical now and it's going to become

increasingly so. I'm not sure whether we as organisations are quite ready for that yet and whether we've got the right mechanisms in place to address that properly. Those of us that have been involved in this are also aware that ICT has had a major impact on both our organisational structures and the nature and roles and functions found within them. For example, the concept of learning technologists as a group of practitioners was non-existent ten or fifteen years ago and they are now a very well established and vital role in our institutions. The very way we work here is changing. The role of secretary as it was fifteen years ago, in terms of secretary typing up notes, is just nonsensical these days so things are changing dramatically.



Let's just consider for a minute what's going on in other sectors. ICT has also had a massive impact on industry, commerce and business. In many ways we have seen a greater transformation in those areas than we have done in education. Education has been slow to shift and I think that has partly been because we've got such complex a set of cultural dimensions. In terms of major transformations, how many of you book things on-line for travel? I couldn't survive without being able to book a flight on-line it would just be inconceivable. How many people book through Tesco on-line or equivalents? We are changing the way we do things and as consumers we are expecting that. The same is happening, or is going to happen, in education. We should be talking about students as consumers. Whilst

that might make us wince, they are our consumers and they will make choices about which institution to go to based on what that institution is offering. The availability of good on-line support is going to be a critical decision and choice maker for them. We do need to think carefully about that and think about their expectations.

So why does education lag behind? Why haven't we exploited ICT far more than we have done? I think we need to step back a bit because it occurs to me that there is a lot of hype around this area. There is a huge amount of 'vapourware' around. You'll recognise these kinds of hyped phrases in terms of e-learning, pedagogical re-engineering, changing practices completely etc. In reality we might want to ask ourselves to what extent is this true? How many of us have seen really, really interesting innovative uses of e-learning? How many people think there will be really innovative uses of e-learning in the next five years or so? We are shifting but we've still got a long way to go in terms of really thinking about how we can exploit technology appropriately to support, not just learning, but teaching administration and research. For me what's exciting about MLEs is that it doesn't divide learning from research from administration it brings the whole lot together.

I suggest the current state of affairs is that we haven't actually got there yet. We haven't reached the promised land that the hype is suggesting. There is still very patchy use of communication tools, although it is increasing. We all use e-mail routinely nowadays as part of our daily lives whereas it wasn't ten or fifteen years ago. A lot of learning environments are still mainly being used as content repositories but that's partly because of the structure of a lot of commercial VLEs. We still have a long way to go in terms of having more innovative, less stilted experiences. So why is there a gap? I think there is a gap because exploitation of ICT in education is complex. Those of us who do research in the area know that the more you research the less you feel you know. We need to think carefully about the relationship between the technologies, the way they are being used for pedagogy and the cultural organisational issues.

With that background I'd like to move on to looking at MLEs specifically as a case study that draws on all of those background issues. I believe MLEs emerged, they were triggered if you like, by the emergence of VLEs. VLEs allow for experimentation. Angela McFarlane from Bristol refers to VLEs as 'a gentle nursery slope' that you can allow practitioners to have a go on. That resulted in lobbying by practitioners of senior managers saying, "Come on guys let's make a decision. What's our VLE going to be?" It started to have an impact on the strategy and policy. In one sense that was great because it meant suddenly that VLEs and MLEs were on senior management agendas but there was a problem - a sting in the tail. In some institutions, once the institution had bought Blackboard or Web CT, senior managers were thinking, "That's it done and dusted - we've got a VLE now, we don't have to worry."

The JISC has funded a number of initiatives, in particular the 'Building MLEs in HE' programme. What was exciting about that programme was that JISC said. "We know you lot: we know we give you money and you're going to come back with a nice glossy report and say everything was perfect. We don't want you to do that with this programme. We want you to come and tell us what went wrong. We know that implementing MLEs is difficult and we want to draw out what the issues are."

The programme tried to critically reflect on the whole process and difficulties of MLEs and to distil out the key lessons learnt. They set up an advisory board, a group of critical friends, to work with the projects and we met the projects once a year for a two-day meeting to try and draw out the lessons learnt. The second part was to develop the JISC Creating an MLE infoKit. That was trying to draw out the particular lessons from all of those reports to put into a practical guide for the sector so that, if you were thinking about implementing an MLE, this infoKit would guide you through that process. It was quite difficult trying to articulate the lessons that would be useful. It would be no use for example us just saying to you, "You need to get senior management on board". So what? How does that actually help you in any way with your implementation? We've tried to put together practical tips which would be generally useful and we would be very grateful for feedback in terms of whether it does help or not. I'm going to go through some of the things that are in the 'Understanding your organisation' section. What MLEs have done is that they have highlighted that we do not understand our organisations and associated structures and processes. We need to have a better understanding of that if we're going to implement MLEs properly. It's not easy. You can't just take an enterprise-wide system and bolt it on to dysfunctional systems and processes. You have to look at changing culture and practice and what that means.

Organisations are complex: very, very complex and difficult to understand. You need to view them from a number of different perspectives to see different aspects of them. There are three main aspects that you need to look at. First of all you need to understand the external context within which the organisation sits: what's going on outside and how is that impacting on the organisation? We need to then map the organisation itself, its structure, its processes, its attitudes, its values etc. We then need to align the MLE development within that two-part context. So, in terms of the external environment, we need to first see what are the current national strategies and policies - for example HEFCE has got an e-learning strategy and the DFES has got an e-learning strategy. These are going to have a major impact on us and we need to be aware of what's in them, to give guidance in terms of what governance, direction and vision and thinking in this area is and how that impacts on us. Policies and strategies frequently steer and direct funding opportunities so we need to look at what the current funding bodies are doing in terms of their vision and their direction. HEFCE is launching its Leadership, Governance and Management programme and JISC has a major new funding opportunity on e-pedagogy. There are also funding bodies like the ESRC for example who are putting over £6 million into developing a new National Centre for e-Social Science. So we need to think about funding opportunities, how we as an institution might opportunistically use them and align them with our plans and also how they are going to impact on things like competition and globalisation. Our local context within our institutions is very important too as are changes in technologies.

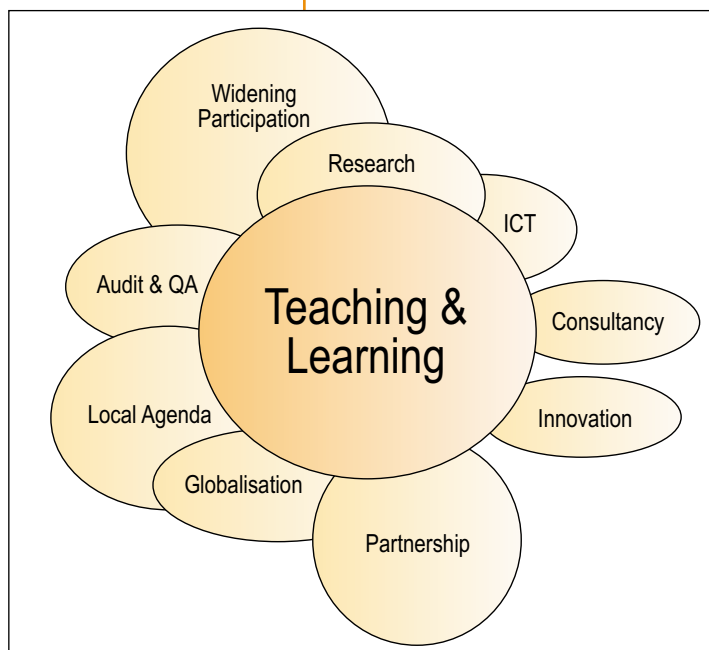
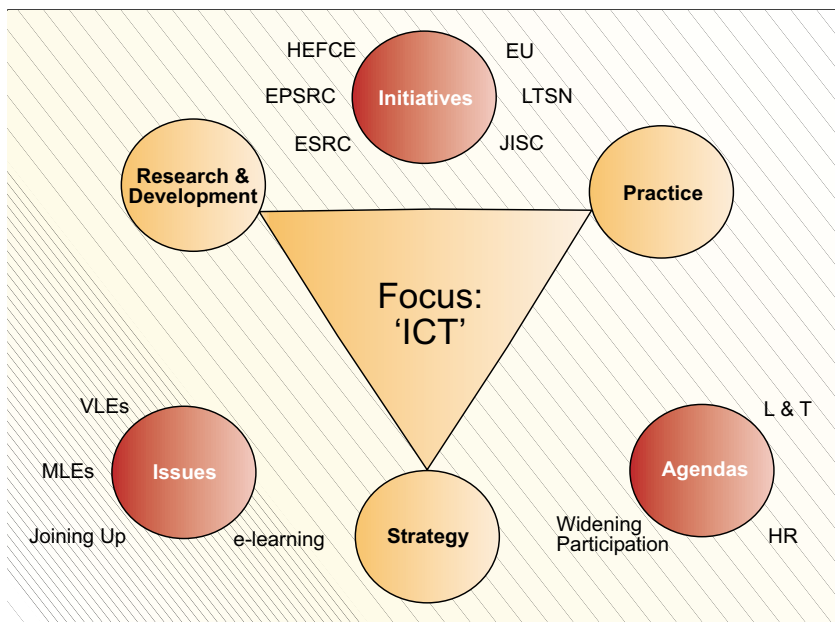
Those of us in HE will be very much aware of the dreaded research assessment exercise looming up again. You can see already that it is radically altering what we are doing. The Times Higher is filled every week with adverts for Readerships and Chairs as everyone tries to buy out research from other institutions. These factors have a major impact and we need to be aware of what the drivers are.

One suggested way of doing that is to give you a diagram of how we might link.

For example the diagram below is an example of a mapping of an external environment, in this case for an HE institution, when you're looking at the three aspects of institutional working. The research aspect, the practice in terms of teaching and administration and strategic development and then looking to see, for that particular institution, which are the initiatives, issues and agendas which are particularly relevant.

Moving to the second of the three areas, the institutional context, it's important that having understood a little of what is going on externally we have a better understanding of what our own institutional context is. I've worked in three institutions: I started life as a chemistry lecturer at what was North London Polytechnic, and is now London Metropolitan University, and then moved to Bristol and Southampton. Southampton and London Metropolitan could not be further apart in terms of their mission and culture. Both Southampton and Bristol are very research driven and London Metropolitan is very much focused on student needs and very much driven by its mission to support widening participation. This was absolutely saturated right across the institution in everything we did both at the strategic level but also individually in terms of what lecturers did. These institutions are very different so therefore we need to understand our own organisational context and what forms us. These are some of the things that I suggest you can look at to help you understand that. What is the mission of the institution - what does it say, what is the focus, the values? What are the core values of the institution and therefore what strategies and policies has the institution got in place to drive that? Who are the key stakeholders: the real power people in your institution? They will be different in different places. I've been to an institution where the real power person is the Registrar, others where it's the Dean for Learning and Teaching and others where it's the Dean for Research or what have you. We will have different stakeholders in our environment that are key in our institutional context. Our institutional culture is shaped by a whole load of things, our size, where we are located, the kind of students we have, the funding we get etc, etc. Just by looking at those and jotting down some points it will give you a very good feel for what your organisational context is.

The next diagram gives a map for a particular institution that is very focused on learning and teaching, so that's the major central core drive of it, but it also has a strong research agenda. If I was to draw a similar flower diagram for my own institution, I would probably do a larger bubble for the globalisation aspect because



Southampton has something called the World University Network so globalisation and international aspects are considered to be quite important.

The Creating an MLE infoKit discusses in more detail the different types of institutions. There has been some theoretical work done in terms of trying to understand different kinds of institutions. It's not clear-cut but clearly an organisation that is much more bureaucratic with strong management is going to be very different from one that has a collegiate structure. This will affect decision making, who the stakeholders are and how things work.

Finally I'd like to draw out some of the key lessons that we found from working with the 'Building MLEs in HE' projects and developing the Creating an MLE infoKit. I will return to the point about not understanding our existing processes. There's a real problem because if we try and map and understand what our organisations are currently doing and how they are currently mapped and the working flows and patterns then surely you can just spec the MLE to match that? But there's a problem, you don't necessarily want to map the MLE to your existing structure: you may want to map it to a new structure that you don't know about which is a better way of working. The second problem is that by introducing an MLE you're perpetrating a change in the system so again how do you take account of that? It's very much a moving target in terms of what we're doing which is a very tricky aspect. The third aspect that is difficult is if you take, for example, mapping the student recruitment process. Again going back quite a few years now to the JISC's Information Strategy programme many of us tried to map such systems. We tried to map student recruitment and immediately we ran into huge problems because a lot of the information about what happens in the student recruitment process is tacit knowledge. It's not where we can grasp it: it's in people's heads. It's actually quite difficult to provide these maps and I'm going to come on in a minute to suggest the way some people are trying to address this by using quite new models. A very strong lesson that came out of all the projects was that it was really important to have stakeholders on board and have stakeholder buy-in and have them clearly understand what the MLE was. It's almost a throw away statement but it is so critical. There was a JISC project to look at the role of something called a Roundtable, a concept from the States, where you try to bring really different parts of the organisation together to look at an issue. MLEs were very much cutting across the different silos of our institutions and that method of the Roundtable was used by projects to try and get that stakeholder buy-in and ownership developments.

In terms of emerging lessons Data Ownership was cited as a huge problem: different people owning different parts of the system and not wanting to lose it caused masses and masses of problems. Our current systems have developed ad hoc over time. We have different legacy systems; the finance system was bought by so and so, the library by someone else and none of them are talking to anyone else. It's a bit like painting a room. Up to now we've had someone painting a bit over there and someone painting a bit over here and actually those two greens aren't the same colour when you get close, it doesn't quite fit. Now in an ideal world we'd just chuck the whole lot out and start again. I have seen some impressive examples of that in the States and that is of course what has happened with some of the big industries and businesses but it's not happened in our institutions. Realistically, in terms of our funding, it isn't going to happen. We've got

to deal with the fact we've got this mess and work out how we get from there to a vision of a truly integrated MLE. It relates to the point I made earlier - we really don't understand enough about our working practices and data flows within our institutions - and it's not a trivial exercise to find that out. It also became clear from the projects that institutions really didn't understand anything about finances and didn't have good costing models. Nicol and Coen of Strathclyde have developed a cost benefit model to try and understand that better (the JISC funded INSIGHT project). Again they uncovered what was already there, that we didn't understand enough about the cost of teaching and research.

I mentioned before about the data systems being built up piecemeal and how we deal with that, it's a clear message from all the projects, but it was also found there were a variety of ways in which we could try and understand organisations and to map them. I'd just like to mention two of those that have been used at the Manchester node of the new e-learning research centre funded by HEFCE. It is going to be explicitly looking at the use of Unified Modelling Language (UML) to try and find ways of better modelling our institutions and working practices. That leads on nicely to some of the work in the standards world. The other interesting innovation, in terms of trying to look at and understand their institutions, is work people are doing at trying to understand metaphors. That might sound a bit wacky and way out but actually some quite useful work has come out of it. There's a book by Morgan which is quite old now (Morgan, G. 'Images of organisations', 2nd Edition, Sage Publications) that looks at organisations in different ways e.g. organisation as brain, organisation as ecosystem and its different relationship to different parts of an institution etc. Going through that you can get some quite different pictures of your institution. Organisations are complex and therefore we need a variety of different pictures and descriptions to best understand them. There isn't one perfect answer.

I think the best example of this is a diagram of an MLE developed by BECTa in 1999 (see JISC Circular 7/00: MLEs in Further Education: progress report, 2000). At every conference you went to everyone was using it because we were desperate for something to explain what an MLE was. After a while people started to say, "Actually it doesn't quite say what it is" and a group set up by JISC under Sarah Holyfield tried to ask "What is an MLE." They went away and locked themselves in a room for two days and came out more confused than when they went in. Sarah's done a very good paper about the different models and representations and ways of understanding an MLE (Developing a Shared Understanding of the Managed Learning Environment – the role of diagramming and requirements gathering, Holyfield 2003). It is a much more complex angle than you perhaps think. We think we know what an MLE is but we don't. Those are just some of the examples of the ways in which people are trying to grapple with understanding organisational culture. In the Creating an MLE infoKit we also go through different mechanisms for finding some of that information out.

The penultimate thing I'd like to pick up on is some work that Jos Boys did in an excellent report for the JISC (Boys 2002, Managed Learning Environments, joined up systems and the problems of organisational change). She looked at and reflected on the MLE projects and again identified the same kind of issues. In particular she highlighted the importance of aligning MLE development work with other activities that are going on. How many times have we been in a situation in

our institutions where the left hand doesn't know what the right hand is doing? We might have one team in one place beavering away doing an MLE development and in the meantime Finance are going off and have already bought a new finance system without consulting the MLE team. Half of the problem is just making sure the right people are talking to each other. Mapping out what's going on in your institution and where the MLE development might align was a really critical lesson to come out. MLE projects have suffered massively, Jos found, from being labelled technical. They're not technical. The labelling of technical and projects being driven by the Information Services team may not be the right approach. Some of the projects have got around that quite nicely by having the Pro-VC for Teaching and Learning or somebody similar championing the project and getting good cross-institutional representation in the MLE development team. The other problem that she found was, interestingly, it was quite a political hot potato developing an MLE and those involved in it did get scarred and have battle wounds. The politics was a real issue and it put the people who were the MLE developers in quite an awkward position within their institutions.

Finally, MLEs are clearly absolutely critical in how we go forward and getting it right is going to be the difference between which institutions succeed or don't. I really do think it's that fundamental. We're talking about the fundamental infrastructure for our institutions and so we really need to make sure that we get it right. People thought MLEs were important because of the potential pedagogical benefits but I'd actually broaden that as well because I think the improved administration making our lives easier is pretty important too. Also the political aspects that come out of that are important. It was also clear, and it is clear, that MLEs impact on all levels of organisations and you need to take that into account. I hope this quick run through has just given you a feel of some of the organisational issues. If you do look at the Creating an MLE infoKit and you've got any feedback, we will be very grateful and we hope that you find it useful in terms of helping you address some of these complex issues.

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Peter Tinson

It Came From Outer Space

Strategy and practice in linking MIS and VLEs

I think the first thing to point out, having been given the title 'It Came from Outer Space' and then seeing it in stark reality, is that the 'It' in the title is not me. What I'm going on to do is to look at how institutions appear to have been almost caught out by the sudden arrival of e-learning, to examine why that was and to try and draw some conclusions.

The approach I've adopted is a number of case studies: four in total. Not all the institutions are represented at 'When Worlds Collide' and I'm not going to name them. If two people recognise their institutions from this then perhaps I've done okay and represented what I was told. If more than two recognise themselves then that's quite interesting; it maybe means that the case studies I've picked out are more representative of the sector as a whole.

I'm interested in how e-learning arrived in these institutions, the role that the various strategies, primarily the information strategy and the teaching and learning strategy, played in the implementation and the level of systems integration. I'll also look at what is happening now, whether any lessons have been learned as a result of the experience and identify some common themes and some lessons to be taken on board by other institutions.

Case Study 1

The first case study is a mid-to-upper table University - in the second quarter of the various league tables. The University strategy, which was devised in 1998, had some fairly positive things to say about innovation and learning. Grand phrases like 'Creating a market focused approach to teaching and promoting innovation in teaching' were included within the University Strategy. An Information Strategy also existed but unfortunately this didn't really reflect the University Strategy. "What was it there for?" you may well ask. I think there are probably a number of institutions that might have gone through the same cycle. "HEFCE has told us we need an Information Strategy so we better write one." So Information Strategies were written but not really perhaps bearing any resemblance or any relationship to the University Strategy.

However, there was some change in personnel in the institution concerned. A new Director for Information Services arrived and developed a new Information Strategy more in line with the University Strategy. One of the things proposed in the strategy was an e-learning unit. This was back in 2000 so fairly reflective perhaps of the



About the Speaker

Peter Tinson is the Business Assurance Manager at City University. After having endured six major systems implementations in nine years as head of the MIS section at City, he decided to move to this new role before anyone suggested integrating a VLE with the admin systems. It was a close shave but he just got out in time. His current role involves a heady mix of quality assurance, legal compliance, change management and customer liaison. He chaired the UCISA MIS Group from 2000-2003 and continues to be a committee member of the group (now CIS Group). Prior to joining City, Peter worked at Queen Mary College developing Computer Assisted Learning packages in various engineering disciplines. Who said e-learning was new?

time. One problem though is that the Information Strategy never achieved that final draft and published status. This caused some problems because the e-learning unit proposed as part of that strategy was not approved.

The institution concerned is fairly well devolved in terms of its management structure so, in order to get anything central agreed, it had to be approved by a panel of Deans. Now although senior Information Services staff met with senior academics in the faculties, because the Information Strategy itself wasn't published, it wasn't known about. It wasn't being discussed so it wasn't possible to sell it and get ownership. When the idea for the e-learning unit came to the planning board and, since none of the participants knew much (if anything) about it, there was no buy-in or institutional backing for the project so it was not approved.

As a consequence e-learning lacked the focus needed for a corporative development and was limited to pockets of enthusiasts. A lot of good work was going on in a variety of departments with developments ranging from use of a VLE within an individual module to whole courses being delivered by distance learning. Because of the devolved management structure, faculties could develop courses like this without really a great deal of consideration for the infrastructure that might be required to support them. One interesting by-product of this disparate approach was that the university ended up with 3 site licences for the same product (memo to salesman re: honesty). There was some interfacing of systems. I use the word interfacing rather than integration as this was largely developed through interpersonal contact where one of the academics concerned realised that it was a waste of effort having to type in the names of all their students and so requested a feed from the Student Record System.

There was a bit of a change of heart in 2003 as the e-learning Unit was finally established. This was partly because of the change in government strategy, partly because the teaching and learning strategy had changed and had picked up on the innovation and teaching part in the University strategy, but also because the University management recognised that the duplication of effort meant there was resource wastage within the institution. The unfortunate thing for the Information Services department given the task with delivering a VLE, was the decision was made very, very late and so everything had to be dropped in order to get this system up and running in time. The consequence of this was that there was no real assessment of the impact or the requirements of interfacing or integration. The link between the VLE and Student Record System was very much something of an afterthought. It has been achieved but it only feeds data on new students.

It is really this lack of thought that began to cause problems for this institution because the e-learning Unit appears to have been quite successful. All the faculties have been involved and the Unit exceeded its targets of delivering modules with e-learning elements. The Unit itself is fairly evangelical: it is going out and talking to academics making them aware of the potential of e-learning but in the present situation more and more student use means more and more data entry, rather than seamless integration.

There is another point in that this particular institution seems to exhibit a fair amount of 'just in time' management. If there is a problem a project will be launched that's just focused on that particular business problem. Nobody does any

impact analysis on how that is going to affect elsewhere and any possible changes that might be required. The reason for that is partly that the Information Strategy is still not really published. Okay it keeps evolving but no one really sees the finished product. As such there is no ownership and, although there's recognition that IT is key and projects are the way forward, there's no real appreciation in the institution of how projects impact on each other and indeed how they impact on the current way of working.

Case Study 2

Case study two is a premier league institution and they first started looking at e-learning during the dot.com boom. At this point the university management thought, "We'll set up an e-learning unit" and one of the major objectives for it was really commercial gain: the aim being to make the unit self-sufficient within 3 years. Course material was developed through giving grants to Research Assistants to develop material with those Research Assistants providing the link between learning technologists and the academics. A body of materials was building up within the institution but, again, it was very much a stand-alone initiative. Interfacing was picked up by the MIS department who built in the links really as part of other projects. The need for them was recognised there rather than at the institutional level.

They are now moving from something that was really a brainchild for making money to recognising its importance and tying it up within the Information Strategy. The aim is to move to a fully integrated Managed Learning Environment. We heard earlier that it probably doesn't make sense to have more than one VLE. The institution concerned here however looked at the needs and requirements of their customers and considered whether one product or a number of products would meet their needs. It took the 'horses for courses' approach and found that one product wouldn't do.

This particular institution came from a fairly dodgy start but seems to have now learned its lessons and have something in place within its Information Strategy. It has put in place projects and resourcing to achieve integration and this work is now fully embedded in the institution's plans.

Case Study 3

The third case study is again another top flight university. The Information Services department took the opportunity to pilot a VLE in 2000 with a number of keen academics. This was largely done on the basis of the Information Services department taking the initiative. There was no will to drive this in the Teaching and Learning Strategy or in the Information Strategy. The pilot itself was deemed a success. Consequently there were recommendations to various committees but there was no higher level support and no sense of urgency to push this through or to make any sort of financial commitment at all. Of course one of the things that universities do in a time of crisis, or when they aren't sure what to do, is to form a committee and so various sub groups were formed in a bid to study further aspects of e-learning.

Another thing that universities are particularly prone to do is say, "Something's changing so we can't make a decision just now." A new Pro-Vice Chancellor came

in with the task of putting together a new Teaching & Learning strategy. During this period, and without any university support, Information Services certainly couldn't make a recommendation for a strategic software purchase and certainly couldn't consider establishing a support mechanism for e-learning and VLEs.

Consequently you have the same pockets of enthusiasts popping up as we saw in the first example. This institution is, however, rather more diverse in its approach. Rather than having 3 site licences for one product they had 5 different VLEs.

So what are the problems this institution has? Again there was a lack of understanding at senior management level of what e-learning was and what it could do for the institution. If you've got nobody with this understanding at senior level, you've got nobody there to convince a sceptical academic body to take it on. After all if you're scoring 24 out of 24 in all your teaching quality assessments then why change? That's a fairly major kickback to try and address. There was perhaps a degree of fear of replacing the traditional learning but also there was the equation of e-learning with distance learning. Because distance learning didn't form part of the University Strategy or course profile then it was fairly easy to dismiss it. However the institution concerned has now realised it was lagging behind a bit and has established an implementation group under the auspices of the Teaching & Learning committee.

Positive words like, "We've watched the market place" and "Of course we learn from other people's mistakes" are being used but you wonder whether in fact that will be the case. There's still not really a champion in this university and so I think they'll have a number of problems. Not least the institution seems to have a fair number of Professor Eccles in its academic body (Professor Eccles is a character in the JISC infoNet video who resists any attempt to impose corporate initiatives on his teaching style). Whether e-learning will really take off or not time will tell but I have some concerns that, because there's no champion, it will struggle.

Case Study 4

The final case study is a rather different institution in that it's a large institution, probably in the bottom half of the various league tables, with a heavy focus on Teaching & Learning. The other institutions used in these case studies place more emphasis on research.

It's also a rather different picture in that its Information Strategy is published, having been developed in concert with staff at all levels in the institution. As such it is really embedded into the institution's planning processes. As a consequence, because it was developed as part of a fairly collaborative process, it has staff buy-in at all levels. Critically, senior academics have signed up to it as well as the senior administrative staff who are essentially going to bankroll any developments arising from it. The development of the strategy led to the development of a number of projects. Procurement of a VLE, moving towards an MLE, etc. not as stand-alone projects but as a programme of related projects - the understanding is there and everything is pulled together and integrated. Integration costs are costed into each project and each group of projects and so they don't have the additional overhead and cost of doing it as an afterthought.

Further developments are planned: after the implementation of the MLE they are going to go on to CRM and further integration of systems. The end conclusion we can come to about this institution is quite clearly that it knows where it's going in terms of its overall strategy. The Information Strategy and Teaching & Learning Strategy both underpin its direction. The institution's heading in a clear direction with funded and fully resourced projects to back it up. This is quite clearly the most successful of the four.

Conclusions

So what conclusions can we draw from this? The first three case studies lacked management buy-in initially or, in some cases, had buy-in but perhaps for the wrong reasons. Projects need that champion: they need to be accepted by the senior academic staff and the senior administrators. Why is that support not always forthcoming? To some degree perhaps there is a lack of knowledge at a high level of what e-learning can do for the institution and indeed what it can do for the customer, the student. I suspect also that there is a certain element of history-come-back as well. Early computer assisted learning and computer based teaching initiatives didn't really take off and I think people sometimes think, "This is one of those things that will go away shortly and we can get back to good old chalk and talk." I think that sort of resistance perhaps exists at the top level and within the academic body at 'traditional' institutions.

A couple of the case studies highlighted where the links between the strategies aren't necessarily that good. The University has its Strategy – how well do the Information Strategy and the Teaching and Learning Strategy support it? Indeed, how well do the two strategies link? How well are they integrated? Too often what happens is that you get a case where a committee is formed to look at a strategy. They go off and work in isolation and there's no University buy-in – it is seen as being 'owned' by the committee. In the first institution they're currently reviewing their University strategy now, but others are not being reviewed at the same time - the view is, "Oh yes, we'll look at the others after we've done that and they'll follow through in their own cycle." They are going to have a peculiar discontinuity if that happens.

In the second Case Study, I think they've learned their lesson and e-learning is more embedded in the relevant strategies. The fourth case study has full buy-in in the institution across its range of strategies. One thing to pick up is customer focus. University strategies quite often have very grand words about having an excellent student environment reflected in their strategies but quite often the Information Strategies have a systems rather than a customer focus. Maybe it's time to sit back and look at why that is.

Another main point is integration in a whole range of areas. I'm not just talking about systems integration, I'm also thinking about structure. Universities do have the tendency to pigeonhole things. "We've got this e-learning unit, where does it sit? It's to do with information, we'll stick it in the library. We'll stick it here, we'll stick it there." What needs to happen is senior management needs to recognise this is a collaborative effort. There's only one way e-learning can really succeed in institutions and that's through collaboration. There needs to be a move away from a traditional hierarchy towards a matrix management model. Strategies, as I've

said, need to be linked and integrated and, more importantly, wholly owned by the university. There is no point in just leaving the committee to come up with a strategy, to meet the needs of say HEFCE or whatever. It needs to be owned by all, it needs to have a key focus and it needs to be integrated with others.

Another issue is that projects are very much seen in isolation: people have too narrow a focus and don't see how one project will impact on other systems. Those that make the decisions on the project don't necessarily see the wider picture. If you just say, "Implement that VLE and we'll worry about integration later" it will never happen because the resources won't be there, they are off doing other things.

There needs to be an understanding at senior management level that projects cannot be viewed as distinct entities. We need to build on this and make sure there is an understanding of the impact of any individual project and how it integrates with other particular parts of the university's business. This area is a weakness in senior management and maybe the Leadership Foundation will take this up. Until then I think it is probably down to Information Services staff to really push the fact that the project has an impact on various other areas and also to push for continued resourcing. Too often it's, "We'll just implement this" and that's the end of it – problem solved. It's not. There are teaching issues and training issues involved and continued support for anything you implement.

So overall, institutions where there are integrated strategies with top level support are going to have an easier time implementing and integrating e-learning into their systems and business. They'll have focus, direction and a clear planning programme. Those without that sort of integration at strategic and management level will find it difficult, if not impossible, to develop and integrate an e-learning environment. At those institutions, it is really down to the Information Services staff working with key academics to push from the bottom up and make sure the resources are available to make a fully integrated solution achievable.

Mark Stiles

Attack of the Clones

Are VLEs/MLEs really changing practice in learning and teaching and business processes?

I did 15 years in FE as teacher, academic and IT person before moving into IT roles, firstly as Assistant Director IT Services, then in 1998 Director of an e-learning Unit (now part of an Information Service). I am someone who is excited by technology (this is probably the result of spending 3 years at a red-brick university watching Maths Lecturers going 8 times round a roller board!). I think the use of technology should be about changing things and innovating pedagogy. After all, who says what we've done traditionally is good? Just because we've always done something doesn't necessarily mean it's any good. We had slavery for centuries but not many people would say it was a good idea anymore.

Clearly we want to get more people involved in higher and further education. My own institution's widening participation agenda is a big issue that involves new ways of structuring courses and new ways of delivery. Look at Diana Laurillard's consultation document for the DfES on e-strategy. This calls for a total re-focus in education on the learner. We couldn't even attempt to deliver on that strategy without a total focus on the learner.

But, the other day I had what I can't call a vision – it was more like a nightmare. I thought what happens when we upload all of our lecture notes and PowerPoint slides into BlackCT and tell the students to write some essays and do some multiple choice tests and all of our courses at all of our institutions look the same again? How do we differentiate each other? What will make us distinctive? What's my market advantage? We'll all look the same.

I thought about this on Monday at a CETIS Pedagogy Forum and was reminded of an episode of 'The Simpsons' where the French launch a nuclear strike on Springfield. The fat guy that runs the comic book shop is walking down the road reading a comic and he looks up and there is a missile coming horizontally down the road towards him and he says "Oh no, I've wasted my life!". And I thought Mmmmm, this is what I'm frightened of. All of this clone stuff is really high tech but is this really what we're letting ourselves in for?

I edited and wrote for the embedding section for the Creating an MLE infoKit because I've actually been working on it - embedding things isn't the same as implementing them and developing them. Embedding involves institutional issues, cultural issues and technical choices. I think you can consider something to be embedded when it's just part and parcel of normal life and it's not just embedded in what you do but it's embedded in the policies and procedures, roles and



About the Speaker

Mark Stiles is Professor of Technology Supported Learning and Head of Learning Development and Innovation at Staffordshire University. He has led the introduction of e-learning at Staffordshire and is responsible for the delivery of the University's e-learning strategy. He successfully led the JISC-funded COSE VLE project, and managed the JISC CO3 Project and SURF interoperability pilot, both of which worked with IMS interoperability specifications. He is currently leading the SURF X4L project on reuse and repurposing of content, and the Staffordshire ICE project on linking VLEs with e-Aggregators. Mark is a consultant to the JISC MLEs for Lifelong Learning Programme, and has just completed a summative evaluation of DiVLE programme. Mark edited the section on 'Embedding' for the JISC infoKit 'Creating an MLE'.

responsibilities that make up that organisation. If you don't invest effort into things like roles and responsibilities, policies and procedures then you don't achieve the cultural change. What tends to happen is you invest a lot in staff development but the very way in which your organisation operates will drag them all back again and after some months they will all revert back to what they were doing before.

Let's face it – we're all very good at writing strategies. Think back to 1998 when we all had to write Learning and Teaching strategies - most of them arrived at HEFCE with the ink still wet - and I'm sure our colleagues in FE remember writing ILT strategies in probably similar haste. The other thing is that strategies tend to be about introducing e-learning not how it's operated in a steady state and that's an important thing to remember. Clearly much of the culture in which anyone operates is formed by the context: the rules by which they have to operate, and I'll be coming on to some examples from my own institution. I'm going to be quite rude about some of the things we did in the context that some of the other things we did were good so that makes up for it. I do feel very strongly that if people see e-learning as something different an awful lot of staff development won't take root. Really what we're talking about is not introducing e-learning but introducing good teaching and learning practice, giving people good methods of doing it and possibly meeting other strategic goals of our organisations. Students are equally conservative and students' expectations are very much formed by what they consider to be the norm. A lot of students can get quite grumpy if they don't get their lectures and yet there is research going back 25 – 30 years suggesting that the average mass lecture is as an effective a tool as a chocolate teapot.

So, a little bit about the national context. JISC did a study of the MLE Landscape in 2003 and discovered the vast majority of people are using a VLE and 75% of people are doing MLE development. The study came up with several reasons why people were doing it - all the usual things were there – we've got Enhancing Quality, Widening Participation, basically all the sorts of things that we would write in strategies. The perceived disadvantages were also fairly obvious ones. The truth however is a little bit subtler. The study showed that if you look deep down into the analysis, very few of the institutions have more than 2,000 learners using the VLE and most of them are down around the 500s. We're not really talking about massive impact here and, if we're not careful, we may turn ourselves into a ghetto of enthusiasts.

So, students like e-learning but like it for some possibly not good reasons. I actually asked a group of students once – possibly about 200 of them in a lecture theatre - who liked lectures and they all put their hands up. Then I said, "Anyone brave enough to tell me why?" and there was an awful silence - eventually somebody said "We don't have to do any work at them!" and they all said, "Yeah, that's it!" It may well be that one of the reasons that people like VLEs is that they can print all the notes out, punch a couple of holes in them and stick them in a ring binder and, there they are, they've done the course!

There was little evidence of enhancement of learning and teaching in the JISC study. It noted that, in general, pedagogy issues have not been addressed. One could summarise the paragraph on this from a slightly cynical viewpoint as saying "In HE we've never really been very interested in pedagogy and in FE they're too busy to cope." It also says that MLEs are not embedded into the Institution's

strategic and operational frameworks. MLE activities are rarely an integral part of the philosophy, policies and practices of the institution. This is why, somewhat sadly, I've got awfully interested in policy over the last couple of years and people now look at me with great suspicion.

So to a series of examples, from my own institution's experience to act as focusing points. I'll be talking about our P2R2 project. P2R2 stands for Policies, Procedures, Roles and Responsibilities – too much of a mouthful to keep saying.

Many of you will face the same issues. Ask yourself for example how long does it take for you to get a new award through a validation? If an organisation bangs on your door tomorrow wanting something from your college or university and they want it next week and you haven't got it on the stocks and quality assured, what are your chances of being able to say yes?

Institutional rhythms block innovation. How do you marry a roll-on, roll-off course with an organisation which has exam boards at fixed intervals, probably once a semester? The focus by and large as we develop our practice, our policies and our procedures is for the benefit of the organisation and not for the benefit of the customer, the learner.

There's also the content trap. We introduce e-learning and the first thing we do is go on about quality assuring the content. We're all getting very worried about disability and SENDA, and about whether we are breaking copyright. This is all good stuff. We don't however tend to quality assure if it's any good educationally. Libraries are just as guilty. I've been doing a summative review of JISC's digital libraries integrated with VLEs (DiVLE) programme. I looked at one project where a university had introduced reading lists integrated with their VLE. They said, "We're really pleased with it because it's brought the academics closer to the library." I said, "Isn't that the wrong direction?" and this went straight over their heads. Again the reading list is something that's delivered at the course level – here's a course and this is the stuff you've got to read for it. Not, here are some activities and here are some resources that might help you with these individual activities. The granularity is not there: it's a block approach still.

Staff Development in general tends to focus on 'getting your stuff in'. Staff actually quite like writing content because it's reasonably straightforward and non-threatening. Start asking staff to do something on pedagogic experiences and they can get quite huffy about it. So what tends to happen is we get awfully good at curriculum but much less good at designing learning experiences.

There's also the technology trap. VLEs, by the very nature of them, tend to encourage traditional approaches. To be fair, mainstream VLEs have improved tremendously the range of things they offer but overall the way they are structured still tends to look at the course as a collection of content to which student beings are assigned. MLE elements reinforce the traditional idea of the course. We see them as linking things up with registrations moving from A to B. We've got our links with the library. The course provides a reading list, etc. Look at each of the different links operating in an MLE: to what extent is it institutionally focussed and in which sense is it focussed on the learner? MLE elements can also reinforce content focus. In some ways they are the easiest bits to do. One of the most telling things is that an awful lot of organised MLEs reinforce organisational ownership of the process.

This is why I went back to Diana Laurillard's e-learning strategy consultation. When we start looking at how we organise an MLE it's an organisational thing. How easy would it be for you to cope with a student who's doing a course at your institution and another institution? How well will that student's learning experience integrate from their viewpoint? How easily would you be able to disaggregate? It's not very easy and in fact there are some projects – SHELL and NIIMLE - exhibiting at 'When Worlds Collide' who are working on that issue.

Busy staff find that reproducing the traditional is less work than thinking of new ways of doing things. Let's be fair academics are under tremendous pressures. Busy and poor students can easily fall into, what I've now decided to call, the e-ringbinder trap for much the same reasons. For instance, in an institution like ours, a lot of students are desperately skint. They're poor so they've got to work and they have dependants, all putting pressure on their time. In this situation, the acquisition of content - getting your notes there - gives you a bit of a warm feeling.

So, a little bit about Staffordshire. We got off to an excellent start. In 1996 we decided to transform the University by developing a learning and teaching strategy to which every other strategy would be aligned. It was driven by the Vice-Chancellor so this helped get buy-in, a 'steer' from the top is a powerful incentive. So, we'd done that, and we'd done some projects on enhancing teaching and learning and technology and we did all the usual things that projects do i.e. lots of people did lots of interesting things and nothing changed. In 1998 the Vice-Chancellor felt that things were not changing fast enough and something must happen. We decided to go into e-learning big time and we bought what was then the secure market leader (be warned – leaders don't always stay in front!) Lotus Learning Space. We also had our own VLE called COSE which we'd been developing over two years and that fitted with our philosophy that one size doesn't fit all. We still adhere to that: one VLE cannot meet every possible diverse need of an institution.

So we got that going and, rather than having enthusiast-led projects, we had strategically-led projects. Each faculty had to submit projects which complied with strategy and we'd give money to do them and by 2002 we had a lot of significant cultural change. Staff were actually talking to each other about learning and teaching! We had lots of modules in Learning Space and COSE. We had, what I'd call some real e-learning going on - as opposed to just having notes in the system and students just going to traditional lecture programmes. We had some full-tilt distance e-learning awards, quite good penetration in terms of breadth across the organisation and we were in the throes of phasing out our Learning Space VLE in favour of Blackboard (we were one of the first to hit that barrier as well and we discovered what a pain it is). We developed VLE and MIS links for enrolment and we were looking at linking library systems up to the VLEs. Another nice thing was that strategies were aligned with the lead strategies of widening participation and learning and teaching. We were getting lots of 'excellents' in the Teaching Quality Assessment which was making everybody happy and we had developed reward mechanisms for staff like learning and teaching fellowships for people who were able to demonstrate excellence – including in innovation. All sounds pretty good doesn't it? But...

After six years that's where we had got - otherwise I wouldn't say what comes next! But... We should have evaluated as we went along. We wasted far too much

time on the laggards. If you consider the classic change 'S' curve where you start off with innovators and early adopters. My advice is: forget the other end – they just waste your time! If you can get through to the majority, you'll do fine. Just let the others leave and go somewhere else. It's actually not a joke – if you do a cost analysis on them they're not worth the time and effort because ultimately they don't change and you've wasted all that time and effort on them.

Our dissemination was not fully successful and we still had people really avoiding strategies rather than going along with them enthusiastically. A lot of our MLE still required a lot of manual intervention. Also, we had problems with getting stuff developed. Things were late and we had creep on what people were trying to do: classic project problems. We had staff with false expectations. Academic workloads got in the way. The support staff on my own team often found out about people doing developments that needed help far too late to be able to help them effectively. Sometimes they found out the academics had already done it wrong and the suggestion to start again went down like a lead brick.

Impact was localised but the parts weren't joining up so it was more 'spotty' than right across the organisation. We were not a 'learning organisation' as they say in the business world, we weren't learning from each other effectively. The rate of change was slowing down. Developments were projects rather than production. We had students falling through the admin net. The JISC infoNet video 'Integration and interoperability: a user perspective' highlighted some of the things that actually happened in our organisation! Support for e-learning ranged from excellent to dire because it really depended on who was doing it.

We also had our Staffordshire University Regional Federation, our HEFCE

consortium, running the foundation degrees (run by an organisation, yes, you've guessed it - called the SURF board!). Now that really showed up problems. If you want to discover problems do e-learning with Foundation Degrees. You'll discover them in spades because all the problems FE colleges have and all the problems you have don't just join up – they compound each other! An example: students were enrolled at the college on paper and the papers were sent to the University where they sat under someone's desk for two weeks. All of the MIS/VLE links in the world can't solve the problem of a student's registration form being under a desk. We had problems of administration, we had quality assurance issues and lots of other problems to do with FE colleges (we'll get to those in a bit). Internally, we didn't have very sharp procedures to say yes or no to people saying, "I've got an idea for a new e-learning course."

Overall, things were not joined up. Policies and procedures were not joined up. The University was not agile. So, we invented the dyslexic Star Wars robot project,



P2R2, a Root and Branch review of anything that affected e-learning in terms of policies and procedures. The idea was that we'd come out with a clear route map so that we could say to someone, "There you go, that's it, that's what's involved." It should cover all the rules and processes to do with who does what. Basically it's led by me with top level sponsorship and it's run by two methods – one's called 'walk through' which everyone understands and the other one is called 'lifting rocks' which I invented. It's what we do in the garden, you pick up a rock and something nasty crawls out. We have interviews, meetings, working groups and a rolling report which just gets longer as we find more and more problems. We have also created an e-learning policy task group which I'm currently chairing.

We are dealing with classic issues such as approval of new proposals. When somebody comes along with a proposal for a new course, how do you know it isn't a waste of time? Is e-learning the right solution for that group of students? Is it a distance learning course, is it a blended course? Is it just using e-resources with the students? Is there a market for it? (We're not exactly good at assessing market demand are we?) There are tensions with Validation and Approval procedures, for example, is it fair to put a lot more work on somebody who wants to develop an e-learning course than on somebody who wants to develop a traditional course? What is it you actually validate about e-learning courses that's different from the traditional courses? How do you quality assure pedagogical approaches? We do it at validation but e-learning pedagogy isn't yet that advanced. How do you treat people in an equitable manner? If, and this is a really thorny issue, I were to offer a traditional course in good standing and I want to introduce some 'e-stuff' - at what point does that course need re-validation/re-assessment/re-approval or whatever you want to call it? When does the quantitative change become a qualitative change? (to quote the Marxist dialectic). There are all sorts of problems with assessment: I don't mean computer aided assessment, I mean assessment full stop. You've got a distance e-learning course and students submit stuff electronically. You get all sorts of interesting issues about whose work it is, methods of submission, what the rules and procedures are and a whole new raft of extenuating circumstances. Categorising courses is another issue. E-learning blows away the concept of part-time and full-time courses by its very nature. If you have a blended course the whole point of it is that students can do it in unorthodox patterns. Students may want to work at midnight for example rather than go to the lecture. There are lots of problems involved here.

The first thing we did was develop what we called an integrative approach to development. We went through the process with each group of academic staff who came along and said they wanted to develop an e-learning course. We used a team of staff from Learning Development and Innovation together with staff from Learning Support and staff from IT. So, we put in the right people in the right place, etc. Those who co-operated fully from the start got a really 'Rolls Royce' service in which we tried to make sure that what they were developing was sensible, we gave them development focused on their needs to develop good pedagogy approaches, we then got learning support people to help them on digitising resources and to actually populate the structure that we built for them in the VLE, planning induction, etc, etc. It really does work well. It worked so well we advanced two e-learning modules from conception through validation and production in nine weeks. Now if you work in any university you'll recognise that as an exceptional achievement.

However, that still wasn't solving the problem of people learning from each other and we still had students falling through the admin net. Support for learners was uneven. We still weren't finding out about developments and if they don't tell you, you can't help them. Therefore the policies and procedures weren't embedded. So, the first thing we decided to attack was Quality Assurance. We got together with our Quality Improvement Service and we did some consultation with academics. Now, what we had in place already was our own Quality Assurance, operated by my section of the University, for Quality Assurance of e-learning at the point of delivery. This Quality Assurance was done before you could put your students on the course. It was done by peer review: we had a QA handbook and some checklists and the idea was that you got your colleague to go through your course and tick the boxes, write comments, sign at the bottom and send us the form and we'd arrange for students to go on the course. We still got quite a bit of resistance to that. By and large there are a lot of people who don't like the idea of their content being Quality Assured. The reply we get back normally is, "No one asked me to quality assure the notes I give as handouts" and my response is, and always will be, "Then perhaps they should."

The approach I've just described was too content focussed. It didn't address evaluation and, more importantly, learning from evaluation. We're all quite good at evaluating but actually doing anything about the results is a different thing. Actually that's not true – we're bad at evaluating but we're worse at learning from it. So, we decided to bring in some changes. We actually made changes to the academic planning process. I 'discovered' a form called a VAL 2 which people had to fill in before they'd be given approval to start developing a new award. We've 'e-learned' it. We put a question in about whether it involves e-learning and if the answer's "yes" then it asks you talk to the people at Learning Development and Innovation. If nothing else, it means we get to know about it which is a good start. We can't actually force ourselves on them - it's a bit difficult to do that - but we can go along and say you should consult us before you develop the course. It gives us some inroads to try and help them. The point of that is it checks the rationale at square one. The form goes to committee and the rationale and approach can be justified. It means that our staff get involved early and we can help plan the development.

Now, I don't know whether you've noticed but academic staff certainly in HE, and I suspect in FE, are often not terribly good at project management. We found that one of the things they really liked was if we gave them one of our staff to manage things as a project and chase people – to say you haven't given the material in yet or you haven't done that. This worked quite well because they're busy people to be fair and it's not something they are trained to do. So there is a shift of emphasis from content to learning experience. In the past the only QA we'd done at validation was to say that people actually had to produce exemplar content for three modules and that was only if it was a distance learning award. What we want now is one complete module with the complete learning experience and clear indicative experiences for two others. So we're focussing on the learning experience rather than content. The other thing we're doing, that we didn't do before, is the content they do provide has to be Quality Assured the same way as if it's about to be delivered.

It's actually resulted in less work for the academics. We've had moans but we

pointed out all it did was shift when things happened and the total of what they were asked to do was actually less: it was shifting focus to more important things. The last thing we added on the end of the trigger forms is it says, "What did you learn from the last run of the modules and what changes have you made as a result?" So if they reply, "We've learned nothing, so we haven't changed anything" that'll be a bit worrying. We haven't had the first round back again yet so we'll see.

Possibly the most revolutionary thing we did was we developed an e-learning threshold statement because when is a course e-learning and when is it not e-learning? I don't really want to stuff a whole load of hoops to jump through on somebody who just wants to make a few handouts available whilst the rest of the course carries on regardless. So we came up with this definition of e-learning: 'A student cannot reasonably be expected, without due provision of individually focused accommodations (to meet the needs of disability, for example), to meet the learning outcomes of the course without accessing and/or engaging with the electronically delivered and/or supported components of the course.' It seems a fair definition of what the difference is between e-learning and putting the notes in the system. That enables us to say if that applies then you've got to do the full and proper QA otherwise it's just a content check.

I'll whiz through some of the other issues. We've had ownership issues. Foundation degrees are interesting in that respect. The student perception is probably where this should start. A student isn't interested in whose problem it is. If I'm working in an SME and doing a Foundation Degree at Burton College for example and it's a Staffordshire University foundation degree and COSE doesn't work - my perception is that COSE doesn't work. It's not that a firewall at the college is stopping me working, or I haven't got a user name or password or anything else. We had a lot of problems disaggregating whose problem it was so in the end what we did was we took a leaf out of support centres and wrote scripts to give to IT staff and teachers in the colleges. It starts off with, "COSE doesn't work" and then goes through and asks them different questions and then points out whose problem it is to solve as it goes through, so it's a proper escalation path and appears to be quite successful. We've had a lot less of those problems this year than we had in the previous two years.

Support staff also need development. One of the problems about a lot of our IT support staff is they have a lack of understanding of how the system is intended to be used by the student. In other words they can test the log in and they can test the system starts up but they don't necessarily understand some of the more subtle things about how the student's actually trying to use it. What we're also trying to do is encourage more and more staff to go out and get involved in the UCISA things, write articles, etc. because that's quite an important development opportunity and those support staff will have a very valuable perspective that people like myself would only pick up in passing.

There are other issues such as Pricing and Costing and e-Recruitment (I don't claim we've got any idea about that one yet). Enrolment issues are interesting - we have a new Masters degree in Negotiated Learning. Negotiated Learning has no curriculum and has a completely granular relationship between tutors, account managers and learners so how can you implement one of them in a traditional VLE? I don't think you can. How do you deal with informal courses? Universities run informal courses; if you follow policies and procedures and rules and

regulations are you flexible enough to accommodate an informal course? Another thing we found from the foundation degrees was that yes, we had a degree course and the students enrolled on it but we needed to put those students into groups by college within it so we wanted a Burton college group, Stafford college group and Litchfield college group etc. Our MIS system couldn't push the stuff out at that level of granularity so that was a problem for us. Another issue: you're a tutor doing an e-learning course and you spot three students having difficulty - how easily can you a) create a little group to put them in and b) assign them special resources to help them? In a lot of VLEs it's extremely difficult to do that on the fly and yet it's a fundamental part of being a good teacher to respond to the needs of the individual.

I've mentioned use of scripts. With foundation degrees we built in a VLE-free comfort zone at the start of each course which meant that we had about a week or so to sort out problems because with such a diverse student population you always get problems. We are now working with the staff re-designing the student information system to address some of these problems.

How you induct and develop staff is fundamental. I'd lean towards integrated staff development now rather than separate staff development. We prefer to do staff development for deliverers as part of the induction process. In HE it's very often the same staff working on design, development and delivery. Once you start working with FE you'll find that the staff who create courses and the staff who deliver them are often nothing to do with each other. It's quite common in an FE college to discover you're teaching a course at two days' notice, so therefore you're unlikely to have written it. It may even be that you don't know how to work the VLE. The problems we encountered were to do with identifying the staff. FE colleges have a lot of trouble identifying in advance which staff will be involved in things because of their funding patterns and staffing levels. How would you get such staff engaged with the VLE and overcome the profound cultural differences? One of the things we've done is produce an induction checklist for staff in the colleges (we're thinking of rolling it out to our own staff as well). It says "You're about to do an e-learning course, have you checked this, this and this? Have you done that, that and that?" For example have you gone into the actual room you're going to be doing the induction in and checked the VLE works in it? The answer's usually, "No". We've found in some colleges that a VLE can work in one room but not in another (usually for some networking reason). Also, have you also actually made sure that you can work the VLE before you look through the material? We also provide them with an induction pack for use with the students.

Course monitoring is interesting. We're actually trying to produce some generic reports monitoring e-learning. Teaching quality's a fascinating issue - we have just started putting papers forward that are looking at the peer observation of e-learning. If you were to use peer observation, as most of us do, how would you peer observe e-learning from the tutor's viewpoint?

Finally to summarise - embedding is about culture, policy and procedure, staff development. Strategy is not enough. You have to involve the administrative and management staff and obviously that implies senior management commitment.

References

You can find out more about the work at Staffordshire at:

<http://www.staffs.ac.uk/COSE/cosenew/reportsandpapers.html>

Creating an MLE infoKit – <http://www.jiscinfonet.ac.uk/InfoKits>

Managed Learning Environment Activity in Further and Higher Education in the UK -

<http://www.jiscinfonet.ac.uk/Resources/external-resources/landscape-study/view> - 2003

Linking Digital Libraries with VLEs (DiVLE) Programme -

http://www.jisc.ac.uk/index.cfm?name=programme_divle

The Northern Ireland Integrated Managed Learning Environment (NIIMLE) project aims to build a cross-institutional Managed Learning Environment (MLE) for the Northern Ireland region that facilitates the mobility of the lifelong learner and supports collaboration between FE and HE institutions.

<http://www.niimle.ac.uk>

The Southwest Hosts Enhancing Lifelong Learning (SHELL) project aims to provide an infrastructure, termed ioNode, for the transfer of student related data between institutions. This framework, based on open source and open standards, is being piloted in the South West within a partnership comprising schools, colleges and the University of Plymouth. <http://www.shellproject.net>

Graham Moore

Return of the Jedi

Putting the student first – portal implementation issues

I'd like to give an outline of the portal implementation at Nottingham and the changes it brought about. What we did was effectively implement SCT Luminis portal in a period of 3 months with delivery to 19,000 students, and gather a lot of cross-functional areas such as learning environment, library and administration and get them talking to each other. It's quite interesting to know that my mobile phone number at the university ends in 666: I think that's how some of my colleagues still view me. But we carry on with the change; we try and cope and I'm optimistic in terms of where we're going.

What I'm going to discuss is very much practical - the issues you will face across your University, or your FE college, when you try and implement something that is enterprise-wide. However just before we go on to the practical details, I'd just like to cover some theory starting with some Portal definitions:

- A secure, single point of interaction with diverse information and business processes personalised to a user's needs and responsibilities;
- Portals wrap an organisation's documents and applications in a single Web interface that provides distributed access, cross platform usability, personalisation, management and security features;
- A portal is an on-line service that provides a personalised, single point of access to disparate resources that support the end-user in one or more tasks;
- A Web-based layer which aggregates, integrates, personalises and presents information, transactions and applications transparently for the user according to their role and preferences;
- An institutional portal provides a personalised, single point of access to the on-line resources that support members of an institution in all aspects of their learning, teaching, research and other activities;
- The resources may be internal or external and include local and remote 'information resources' (Web-sites, learning objects, images, information lists, etc.), 'transaction-based services' (registration, meeting bookings, etc.) and 'collaborative tools' (calendar, e-mail, chat, etc.). Typically, access to many of these resources is restricted to authenticated members of the institution.

The definitions aren't mine (I apologise if they're taken from your website); they are just some key phrases including: secure; single point of interaction; personalised; I



About the Speaker

Graham Moore is responsible for the sourcing, planning, development, implementation and maintenance of the University's portal strategy at the University of Nottingham. Most recently he was Programme Manager for Business Systems development at the University co-ordinating the implementation of several core university-wide developments including HR, Finance, Student Administration, a Business Intelligence portal, an alumni portal and web based workflow. He has a background in business, financial and IT solutions and has been an invited speaker to several national and user group conferences. He was previously Chair of the HE Agresso User Group between 1999-2002.

like the phrase – ‘wrap an organisation’s documents’; distributed access and cross-platform usability. A good definition is ‘an on-line service that provides a personalised, single point of access’ or ‘a web based layer which aggregates, integrates (not interfaces), personalises and presents information.’ The phrases ‘personalised, single point of access’ and ‘on-line resources’ keep coming up - all aspects of learning and teaching and research. Finally, the one definition that doesn’t include personalised: ‘Resources may be internal or external, local or remote.’ This one is transaction based and suggests you’re supposed to be able to do everything in a portal. Given time maybe this will be the case but not immediately.

What are the benefits of what we’re trying to do: the real practical benefits? We are trying to integrate information and services into a single source and I’ll quite happily say where we went wrong. We have a website that is all things to all people. We have so much duplication across our schools and central functions that there is no one way into the system.

What we want to do is create one simple solution for our students so they know where they actually have to go to access their information and so that students and staff make better use of their time and the services available. You may remember that bit in ‘The Hitchhikers Guide to the Galaxy’ when they come to blow up Earth to build an intergalactic highway and the Earth people say, “Excuse me but we didn’t know about this” and the developers say, “But there’s been a planning notice up on Alpha Centauri for the last 4,000 years”.

Our whole website is like that: the right information is out there but do the right people know the right information is out there? We do give them clues - perhaps we send them an e-mail – one of 50 others and they all look the same. What we want is one simple solution to make the university information more widely available. We have 4 or 5 major campuses and another 16 or 17 satellite campuses. We need to make sure that all the students get the same experience but so far we’ve not been able to do that very easily.

Here’s another good definition (although I accept it’s a bit like buzzword bingo), ‘Give individuals the freedom to accomplish the task they want in the time they want?’ Is that really true? We’ve seen in our stats since we implemented the portal in September that our students do use the portal at all times of the day and night. We’re already running some global courses and students on particular courses are logging on at Internet cafés or their work PCs. We’ve got a wonderful graph to show that students do get up before 9 o’clock and do open up the portal; towards lunchtime they are very busy; Wednesday afternoon some people still use it (but some play sport) and they are still using it at 2 or 3 o’clock in the morning. We’ve worked out the best time to do any sort of development is round about 3 minutes past 5 to 5 past 5 in the morning which actually won’t affect anyone.

So it would appear that we do have people using our portal all the time. I think the next thing is very important - tailoring the information to the individual’s needs. If you do it right it will improve the experience because you’re personalising the information. You have to accept, however, that there is a lot of risk that goes along with that. For example, in October we provided personalised exam timetables through the portal and we told our students that this was the only place to get them. We later on provided them with the exact locations of their exams, seat

numbers etc. All the information they needed was all there. Our portal went down for 20 minutes on a Tuesday morning at the 'at risk' period when we were doing an update. I was told by one of our departments it meant that some of their students couldn't find their seats in the exam hall. They were so used to instant access to the portal that, when they couldn't get into it an hour before their exams, they didn't know where their seats were. I did tell them all to print out as well but we have to accept we may have been at fault.

This is the sort of issue you do find but if you can get it right then it does improve the experience. The previous speakers have said this, but it is so true: we need to focus on the student as the customer not on administrative processes. Does the student actually really care whether a report comes from portal X or portal Y? How many times have you seen them queue up outside a department only to be told, "You need to go there." We have to change that concept. In creating a portal we're creating a virtual admin office that delivers what the student wants and is looking for. It is key to get that across: the student's the customer. We've actually taken the brave step of having students on our Project Team. I'm not just talking about a member of the student executive because, as I told the President, he's not a real student this year so he doesn't count. We've actually got students who've been with us through the process, who make comments and represent the student body.

I have a business background and I had to make a business case for the portal development. There will be eventual implications for local stand-alone systems. One or two speakers have already talked about the implications of data flows and you have to get that right. I was fortunate in a way that for three years before getting the portal role I was heavily involved in the development of business information systems. We effectively built new Finance and HR systems using a best of breed approach. We used a core underlying data structure which meant that there was a common link at one level. I say at one level, because it is very, very difficult to actually say we built it at school level and because it differs if you're talking about Finance or if you're talking about staff. We have different structures.

It did give us that start and it does mean that bit-by-bit we are getting rid of the local systems and all that administrative support. We've stopped all the downloads we used to have to do. Some of the things we're doing on the student/staff side are eliminating paper. There's more of a widely accepted use of the portal now and certainly we do go in and check that the data is right.

We haven't got it right yet though. It brings up issues all the time and the worst thing you can ever do is think you have got it right. Just a minor example - we use a staff ID for staff on one of our projects at the moment. Research staff can access individual information on their research projects: it looks like a bank statement.



We've given them that information using the one simple staff ID to do that. It was quite interesting however to find that there is a practice of giving a new staff number when staff move elsewhere within the university – and they may still be managing the same project! The issues aren't technical: they're about people and getting people to understand what it's all about and change the processes. You cannot take your existing processes and slap on a new system - it's not feasible. So we will be in for business change – it's why my number is 666!

How do we ensure the focus we need? Executive Sponsorship! Make sure you have the sponsorship from the top. Make sure you involve peer groups. Within the portals and business systems in the University, we don't have business steering committees - we have industrial type boards. The chair of the project board or discussion board is an academic and we have sponsorship at Pro-Vice Chancellor level. It's key to whatever you're doing, especially when you need a referee or an umpire to sort out the problem. You must involve all the customers from the outset. This is not about you - this is not about the university's steering board (they take too long) - you need key project teams available. To echo what was said earlier – laggards aren't worth the effort and you have to be willing to leave them behind. You have to keep an eye on them - they can be wide-boys and they can cause you problems in your project. Watch out for them and understand who all your customers and stakeholders are. You need to think laterally about where you are. Again that causes problems because we do work in silos. We're all conscious of that fact but you need to reach across those silos.

Make sure you've got a well-defined scope for the project. It doesn't matter if you're doing the project in 3 months, 6 months or a year: you must have a well-defined scope. Whether you're bringing in an MLE or bringing in a portal it's just as important. Why? It's simple project management really, because you know what it's like: someone comes in and says, "Wouldn't it be nice if we could do this as well?" It ends up taking 2 weeks and you've missed your project deadline. You've got to stay focused, understand what the core areas are, understand what you're dealing with and understand if you are presenting a product that's suitable for working in certain environments. You need to make sure that all your public and other relevant areas have machines capable of supporting the software. It's important - you need to get it right. You'll get the blame for it. Even if it's not your area, you can't say that it is enterprise wide without this.

Build on an existing strategy: it is assumed you have one. A lot of our institutions don't do that: they do not have linked up thinking. You need to build on a strategy. It's no good saying, "We've got what we've got - we'll have a portal, we'll have an MLE - let's just do it." It doesn't work like that.

Make sure you know what your risks are. We've already talked about people we have to leave out because it's not worth the effort but what are the other risks? We've already talked about the key one, managing expectations. Understand and let people know, exactly what you are going to deliver. When I took over the portal project in February 2003 the plan was to reach 75% of Nottingham students and have 75% of the functionality of the portal available by September – it was just an impossible target. Has any one worked out what 100% commission of a portal is? It just seems an impossible task. So you have to manage the expectations.

The first thing I did on 1st February was to run a pilot for 1,500 students. Not,

admittedly, with SCT - we were using a new portal but the pilot was very, very useful because we did a full survey and questionnaire. We asked students what they found good, what was bad, we stopped them coming out of the pub and asked them why they weren't on the portal right now. That gave us excellent feedback which we fed into the live version so it meant that when it went live in September there were actually things that they'd asked for. It was interesting feedback - our core business is not just about education, it's about the social side as well and it has got to the point now where the Students' Union want to put things into the portal for next year. So, we put 'Football 365' on the pilot portal. It's world famous. If you look at the survey and ask what was the most useful, much to my surprise, it turned out to be past exam papers and the link to the library. The pilot was important - with this sort of development you can't write it in one go - it is impossible to do that. We're constantly developing every month.

Communication is important. The right level of communication is important as well. You can imagine that with a three-month time frame communications need to be going out there so people are aware what is going on. We did that through a variety of methods but you can't beat getting out there and doing live presentations. I do them at our schools and I do them on their equipment. It's just so important to see what you're facing. It's caused me problems from time to time - I walked into one particular school (which shall remain nameless) to find out that 48 critical updates needed doing. But at least you know what the problems are. The key thing that came out of this was that it was the school areas, not the public access areas, that weren't up to date.

The portal has been branded 'The Killer App'. This is buzzword bingo again, but it is important. You need a reason to get people into your MLE, your portal or whatever. You need to show what it is: a single sign-on to the library, a single sign-on to the e-mail. We've kept the 'hook' in: the exam timetables, the provisional ones they have to check and the real ones that give them their seat number. They can only access through the portal - we've cut off other avenues.

What about staff? We're looking at research at Nottingham. There are three key things that were requested by researchers at Nottingham: "We need a bank statement of our projects. We've got a good Finance System but it's good for accountants and not for us. So, can you give us a bank statement and can you link it to the contract and can you link it to the purchase invoices?" "We'd like a collaborative group that we can use - it doesn't matter where we are in the world, it doesn't matter who we are. We'd like to include people from outside the institution in it." "We'd actually like to set up our link from the library free". We were able to provide all those three things, and therefore all of our research communities had those areas as the first areas of their portal. You need to find that hook otherwise they'll just visit and not come back.

You need to show that you are proactive and you develop. It's no good being in the situation where somebody comes along to you and says, "I've got an idea" and you say, "Ah, six months, nine months maybe". You need to have a development that's constant and aware of the change. And in order to cope with that change, you need to be proactive.

Have you got an honest strategy? We have and we have it out in the open and we need to be able to react in that way. It is important that you're not just thinking of

the now, but about the future. We have only just started. We've now got 22,000 students using the portal, 50,000 research projects and something round about 1,800 staff, but we're only just beginning.

All of the issues we've talked about – the silos, the cross-functional, the data mapping - it's strange that none of them are about the technology. I think that's the important thing to remember.

Debate

Given the difficulty of getting a definition of Managed Learning Environment is a better way of looking at it that a well-structured portal is a Managed Learning Environment?

Graham Moore – It's a very good question, we've got two and a half virtual learning environments and we are very much trying to focus our portal as incorporating learning environments. We certainly treat it as a single sign-in gateway to learning environments. I would personally say that the portal is a gateway, it's not a learning environment - it's a lot of other things as well.

Mark Stiles – I think that the point about MLE is that an MLE by different definitions is going to be differently defined because an MLE has a distinctive characteristic depending on whose organisation the environment's in. To me a portal is probably an essential component of an MLE just as the things that a VLE does are an important component of an MLE. I think it's debatable that MLEs/VLEs as we know them need to stay in the form they are when really what we're talking about is lots of different services interoperating to make up the whole of the experience we offer our customer. Obviously the way you may want to present that to a customer is through a portal but ultimately it can't be the MLE because the portal is only as good as what it is presenting.

Grainne Conole – I think it doesn't matter whether it's an MLE or a portal the issues are the same to me in that it's still about the difficulty of mapping our organisations and their processes and that is very, very complex. We need to therefore look at these issues in a number of ways to get to the whole picture and it's also about addressing end user needs. Very clearly it's about understanding what users need or want from a portal or an MLE. The difficulty there again is change; what the needs are today may be different to the needs in a few years time when we use technologies more. By the very nature of interactive technology, our needs change as we see more opportunities. A good example of that is the way we've changed so far in the use of e-mail compared to ten years ago. I certainly use it as a completely integrated part of the way I work in everyday life: it's linked to my tasks, my calendar, everything. I think as we have more portals, more MLEs and better-targeted portals and MLEs, our practices are going to change. It's a very complicated balance between the two things.

Could it be that we are not learning from history? Are we not still using some outdated methods of systems development?

Jacquie Kelly - I think that it's very important that you talk about learning from history and learning from our mistakes - that's part of what we're trying to do – it's getting people together to discuss what they have been doing and what has worked and what hasn't and we do share our experiences. You're right in the view that various JISC outputs have taken a lifecycle approach to the development of MLEs. I suppose what we're trying to do here is just be pragmatic. We've got to have something to start with and often that is at a strategic level, asking yourself why do we actually want to go forward with these kind of developments? So, you've got to start somewhere and then when you actually want to evaluate your

About the Panel

The Debate Panel was chaired by
Bernard Paton, JISC infoNet

and comprised:

Grainne Conole, University of Southampton

Jacquie Kelly, JISC infoNet

Graham Moore, University of Nottingham

Mark Stiles, Staffordshire University

Peter Tinson, City University

project you've got to have some point where you think, "That is the finish of this project and therefore I can evaluate summatively" as well as the evaluation you do on an ongoing basis. That's one reason why we have this lifecycle approach – it's a very useful view. I do agree with you about using different methodologies and looking at things like soft systems methodologies especially when you're dealing with the human aspects of developing MLEs. What we're trying to do at JISC infoNet is to say to people, "Okay what technology do you use? Have you used soft systems or UML for this part of the work?" Tell us how you used them and give us some examples that we can actually give back to the community so that we can learn and people feel that we are learning from history.

Peter Tinson – To pick up on one of the points that Jacquie raised there I think in many cases some of the university management tend to say that once the project is finished then that's the finite point. It's all too easy not to do the key thing which is evaluate what has been done and move on and continue that evaluation throughout – having constant review as a normal planning process. I think we could get systems that are devolved and move with the times perhaps a little bit better than they have done in the past.

Mark Stiles – I think that one of the problems we've suffered from a systems approach within education is that traditionally we've been good at doing the easy bits. We've got student information systems, we've got finance systems, etc but the education bit is really difficult because actually it's not very managed and this is one of the problems we've got. Even when we start approaching looking at the education part of our activities we then start picking the easy bits of it. Hence the fixation for example on content which is much more manageable. It is one of the problems we have to face.

What criteria might we be able to use to evaluate whether we've been successful or not in this implementation?

Mark Stiles – Evaluation's a nightmare and it really does depend on what you're trying to evaluate. Yet again you go back to what I was just saying - if you create a finance system, a successful finance system is reasonably easy to evaluate. The success of something like a Virtual Learning Environment implementation can only be evaluated if you've got criteria that you set yourself. In other words it's got to be about what your organisation measures as success. In our case measures of success would be based on, "Does it enable us to get more students from widening participation? Will it enable us do more work with partnerships?" That wouldn't be the case for a different university. One criterion I'd like to use is, "Did students learn anything?" but that can be awfully difficult to evaluate.

Peter Tinson – the other thing is to turn it round and get your customers involved in the evaluation. If one of the things you're looking to achieve is widening participation then you can turn round to the students and get feedback from them as to whether the VLE, MLE or whatever delivers the solution and the information they need in a nice integrated way that allows them to work at home, at all hours. Maybe you can take it further, if you're doing Foundation Degrees, by working with employers and speaking to the employers too.

Grainne Conole – I totally agree that evaluation is a nightmare. Often in e-learning you hear the question. "How cost effective is e-learning?" or "Can you evaluate the

value of e-learning?" The question you need to throw back is "How much do we know about ordinary learning and teaching? How do you evaluate how cost effective that is?" It's a very tricky business and I would like to move towards not rigid quantitative criteria but much more of a formative interactive evaluation so we're actually being critically reflective all the time.

Graham Moore – Whatever you're doing, do it at the beginning. Work out what it is you're trying to do and be honest about it.

Jacque Kelly – I also think it's important that you go back to your teaching and learning strategy and your institutional strategy because they're the pointers as to how you can judge whether or not you've been successful. What in that strategy led you down the path of MLE implementation? If you start off with a project-based approach then you're going to have a business case, etc and as part of that you should include your aims and objectives for the project and very clearly state how you're going to evaluate that project and how you're going to judge whether or not it's been a success. I think there are things we can do but you've got to do them right at the beginning.

This is to challenge a statement that was made earlier where essentially it was said that academics don't make good project managers. It fits quite nicely with the theme of the day, academics and administrators, because academics do make good project managers but they do so in different ways. They manage learning and teaching and research very successfully; they don't use the same terminology that administrators may use when they formally make a project and then follow it through the steps of traditional project management.

Mark Stiles – I can hardly deny that being an academic myself. Certainly what you're saying about academics managing teaching and learning and research is obviously true because it happens. But, our experience is, that when it comes to course development they have a lot of trouble delivering to timescales. I think it's because it challenges the model by which they've developed traditional courses, in other words when they're developing a traditional course, there's a different set of things that have to happen and I think they have trouble with that. So that's one of the reasons we found it worked well to have a third party working with them.

Bernard Paton – It would be remiss of me not to mention that there is an infoKit on Project Management on the JISC infoNet site – it's actually been one of the great successes of this year so there's a lot there on project management for those who feel their academics aren't really project managers!

We're all talking about organisational change and understanding an organisation so we can achieve what we set out to achieve. What we are not saying is, "What is it that we are achieving - what is e-learning?" I don't really see the common definition and I think we all need that. Years ago when we started to talk about VLEs at an institution we used to take a couple of minutes to explain what it is and I don't think we're doing that about e-learning.

Grainne Conole – I'm glad you asked that question because something that's very close to my own heart is a bugbear about the change of terminology: ICT, ILT, C&IT, e-learning all these terms. We're talking about managed learning environments –

it's the wrong term, it's not just about managed. I got so fed up of this that, for a joke at a few conferences, I started to introduce the term 'Augmented Learning Environment' and lo and behold in no time it was picked up. It shows what state we're in actually as a community. A group of us have been looking at this to try and get some common terminology and try and have some common framework. Part of it is because e-learning, or whatever you want to call this area is a new area and we haven't quite bedded it down yet to come up with common terminology. The other problem is what is e-learning? Should we really be talking about e-learning? It's about learning and teaching generally and one of the exciting things about this topic is the way it's acted as a genuine catalyst to open up the learning and teaching debate. What managed learning environments have done, which is even more exciting, is open up the whole debate on infrastructure in our own organisations and the technology's almost irrelevant.

Mark Stiles – We did actually attempt to do a definition of e-learning. The thinking behind it is really to try and draw a distinction: is the learning dependent on the technology or is it merely supported by it? I felt that we had to attempt to come up with some definition that actually drew a distinction between where a student's learning was absolutely dependent on technology and where it could support or enhance it. Really it should be about the learning and teaching, the technology ultimately should become an irrelevance.

A question to Graham Moore – What was the staff reaction at the beginning to your project and has it changed? Particularly, what was the attitude to such a top down approach?

Graham Moore – I think we've got to look at it on two levels. Mark and I talked about how there are some schools who, on any enterprise or implementation – an MLE, a portal or whatever, are always going to make a fuss. The reaction from them was as it always has been. With regards to the rest, in terms of the top down approach, we involved academics so that the Chair of our strategy group was a leading academic. To actually have them stand alongside me was a big, big advantage. However, despite that, I think we still have to prove ourselves for a variety of reasons. Even with key people standing beside me there's a little bit of suspicion. When you can get information available on the portal and people are finding it helpful, you suddenly start to get people to believe. Then you start to get expectations growing and that then becomes a problem in itself. You really do need to be proactive.

Just a quick point about the technology - it is not how do we use computers when we teach it's how do we teach now that we have computers?

Bernard Paton – Good point on which to end. It strikes me, having watched developments through the day, that there have been a number of very key themes that we've at least touched upon. I said right at the very beginning that we've given the contributors today quite a tough task in trying to sum up what is a tremendously diverse sector and they've done a pretty splendid job. A number of issues have struck us about themes we need to take forward. We started off with organisation, the cultural issues, and I think we got to grips today with some of the sheer diversity of the sector. That actually doesn't depress me at all, that gives me a tremendous sense of excitement about what we're in the middle of and how we take it forward. I think that the last point is a particularly good one because we

have actually had several contributors who've referred to this – we've got to remember what it's all about. Actually at the end of all of this learning process there is actually something called a student or a learner and I think it is very timely to remind us that that's what it's all about and not about technology so thank you for that.



About JISC infoNet



About JISC infoNet

Whether you are a senior manager leading institutional strategy or you are working in the field of systems, processes or e-learning, JISC infoNet has resources that can help you improve the support for, and quality of, learning and teaching in your institution.

Our resources are freely available to institutions and individuals in the further and higher education sectors, with our website providing the main access route to our materials. Core resources include a series of infoKits covering key topics relating to the lifecycle of planning and implementing information systems. The infoKits are a set of on-line resources that consist of a subject overview, a step-by-step 'how to' guide and a resource layer made up of reports, case studies, templates and other supporting materials. In addition on-line discussion groups are available within the website to facilitate discussion and share good practice within the communities.

To accompany the infoKits, we run series of regional one-day workshops in association with the JISC Regional Support Centres (RSCs). The workshops cover topics such as: Project Management, Creating an MLE, Records Management and Process Review. Details are available under the events listings on our website.

We also have a directory of additional external resources and are continually adding to and developing the content of the site. We send notification of new developments via our JISCmail service - you can join this at www.jiscmail.ac.uk/jiscinfonet

To find out more about the Service and our resources visit our website at <http://www.jiscinfonet.ac.uk>

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Glossary

ALT	Association for Learning Technology (http://www.alt.ac.uk)
ASP	Application Service Provider
BECTa	British Educational Communications and Technology Agency (http://www.becta.org.uk)
C&IT	Communication and Information Technology
CETIS	Centre for Educational Technology Interoperability Standards (http://www.cetis.ac.uk)
CRM	Customer Relationship Management
DiVLE	Linking Digital Libraries with VLEs (http://www.jisc.ac.uk/index.cfm?name=programme_divle)
DFES	Department for Education and Skills (http://www.dfes.gov.uk)
EDUCAUSE	US Higher Education IT association (http://www.educause.edu)
ERP	Enterprise Resource Planning
ESRC	Economic and Social Research Council (http://www.esrc.ac.uk)
FE	Further Education
HE	Higher Education
HEFCE	Higher Education Funding Council for England (http://www.hefce.ac.uk)
ICT	Information and Communication Technology
ILT	Information Learning Technology
IMS	IMS Global Learning Consortium inc. (http://www.imsglobal.org)
IPR	Intellectual Property Rights
JANET	Joint Academic Network (http://www.ja.net)
JISC	Joint Information Systems Committee (http://www.jisc.ac.uk)
LTSN	Learning and Teaching Support Network (http://www.ltsn.ac.uk)
MIS	Management Information System
MLE	Managed Learning Environment
NIIMLE	Northern Ireland Integrated Management Learning Environment (http://www.niimle.ac.uk)
NUS	National Union of Students (http://www.nusonline.co.uk)

OECD	Organisation for Economic Co-operation and Development (http://www.oecd.org)
QA	Quality Assurance
ROI	Return on Investment
SCONUL	Society of College, National and University Libraries (http://www.sconul.ac.uk)
SCORM	Shareable Content Object Reference Model (http://www.adlnet.org)
SFC	Scottish Funding Councils (http://www.sfc.ac.uk)
SENDA	Special Educational Needs and Disabilities Act (http://www.hmso.gov.uk/acts/acts2001/20010010.htm)
SHELL	Southwest Hosts Enhancing Lifelong Learning (http://www.shellproject.net)
SME	Small-Medium Enterprise
UCISA	Universities and Colleges Information Systems Association (http://www.ucisa.ac.uk)
UML	Unified Modelling Language
VLE	Virtual Learning Environment



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